

This Months List: 252 BBS Run by Women AUGUST 1994

BOARDWATCH **MAGAZINE**

Guide to Electronic Bulletin Boards and The Internet

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CONNECTION**
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ZINES
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**Rick Heming (left) and Jim Harrer with the Mustang
Software crew at their new headquarters facility in
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IRC 5,000 Channels of Global Gab

BOARDWATCH MAGAZINE

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Mapping Your Area

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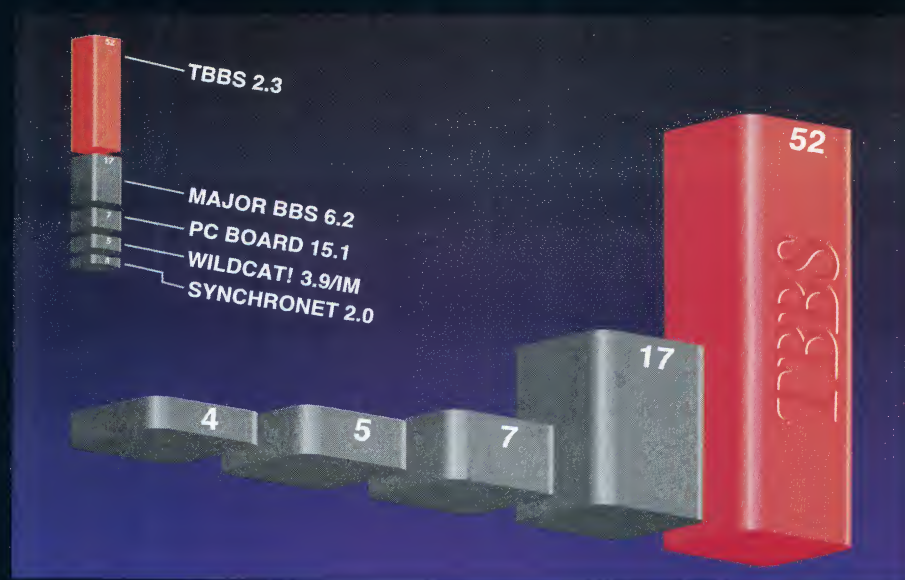
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EDITOR'S NOTES

NETLOCK - THE INTERNET BUSY SIGNAL IN THE CRYSTAL CATHEDRAL

We first began talking about a thing called "The Internet" in 1989 about six months after domain name service came into being. In January 1992, our cover story introduced "Connecting BBSs to the Internet" and we've been following this theme of the BBS/Internet connection as chief arm and flag waver for several years now. It's rather become a pet project to get everyone on the planet on the Internet and some say I've obsessed on it just a wee bit. I've even written a bit of code where necessary along the way between magazine issues to get parts of it to happen.

So I would rather take a coast-to-coast flight in my electric clothes dryer than suffer anyone to question whether or not the big "I" is the be all and end all of online existence. It is with some hesitancy that I might mention the following:

It may be over.

With all of the interest in the Internet by an ever widening online populace, and tremendous energy in a whole new frontier of software development to bring Windows and DOS and so forth into IP connectivity, it just doesn't seem to be appropriate that it be so. But there is a very real possibility that the teeny minor little bit of confusion on the part of those trying to build the information superhighway, about the difference between connectivity and capacity, may reach a critical point in the months ahead. The Internet is just about stalled out - some would say non-operational - even now.

We have a couple of connections we play with. We use NETCOM for a UUCP connection and a 28.8 kbps dedicated SLIP and Rocky Mountain Net for a 56 KB leased line. We don't really do much with any of it but play around with it. But it's Thursday afternoon and I entered an ftp request on one of the machines nine minutes ago. It's still looking up their IP address from our hosts domain name server.

NETCOM has been so busy adding accounts that their customer service no longer actually exists in reachable form. If you can get through, they are a great bunch of guys, just completely buried. They have to have sunlight mailed from home so they can see what it looks like. Their terminal server can't talk to the

Hayes Optima 288 modem on their end and they have to reset it by typing AT if the connection goes away for any reason. We were down four days last month waiting for them to type "AT." Our Rocky Mountain Network host changed the name of their name server machines about 5 weeks ago and we have not been reachable through the boardwatch.littleton.co.us address SINCE then. As it turns out, this is because the authoritative domain name servers for the Western United States still have the old name servers at Rocky Mountain Net (which don't exist under those names anymore) listed in their database. How does this database get updated in this highly automated global network? Somebody has to go over and enter the file entry at the keyboard by hand. And WestNet is sure that is really Colorado Supernet's job. And Colorado Supernet is really sure it is WestNet's responsibility. Rocky Mountain Net is stuck in the middle. We're not even really in the discussion and I'm sure everyone's a little bit uncomfortable that we know as much about it as we do, which isn't much.

Bulletin boards are currently hopping from one UUCP provider to another. They all work for awhile, then word gets out, everybody jumps on the one that works, and it doesn't work anymore. This is complicated by a religious dogma within the UNIX community that their machines have endless capacity. One of them can be down on the floor with smoke pouring out both ends whimpering for its life, this does nothing to dissuade them from the illusion. If it doesn't work, it must be something on your end or something you're doing wrong. The machine is invincible and if it appears otherwise, you must not be viewing it correctly.

Despite the growing inability to service existing accounts, we're also starting to see totally nonsensical policies creeping into the commercial service providers world that actually PREVENTS connectivity. There are rumors that some of these services will no longer accept outbound USENET messages unless you are getting your full USENET feed FROM them inbound as well. This is in reaction to the perfectly lucid strategy of bringing in the bulk of USENET via satellite and just transporting your e-mail and relatively tiny amount of USENET replies by telephone. Apparently this drops the connect time to some of these services and they WANT you tying up their phone lines to the point they become inoperable. It's crazy.

Behind all the smoke and mirrors of the Internet, is an aging wizard behind the curtain cranking the wheels furiously. Internet's dirty little secret is that almost all functions to add or delete users, maintain accounts of any sort, and even the supposedly automated domain name service is done manually. It reminds me of a very high tech experiment in movie delivery by telephone conducted by U.S. West last year. You could simply enter a movie selection on a little keypad and the selected movie would appear on your TV a few minutes later - magically - after a technician read the entry off a screen and walked over and loaded a VHS videotape into the wall of VHS players they erected. What a miracle.

While the thin gossamer web of lines linking all this together can theoretically handle the traffic, the machines that do the domain name look ups and handle the mail that they connect are very nearly swamped. The support functions necessary to make this work at all are essentially no longer functional. And you can't get any of them to do anything with a prayer of it actually being done correctly short of six telephone calls and three attempts on their part.

Then there are the problems of success on-site. If you are going to have an ftp or telnet site, or an IRC server, or world-wide-web, it wouldn't make much sense to spend a lot of time and money setting it up and then not have anyone use it. Books and magazines publish reviews of "neat things you can do on the net" and over the weekend, you suddenly can't do them anymore. You can't get in - at all.

So in some cases they change the site name. We used ARCHIE to locate a single common file on the Internet. This is the magical distributed database of ftp sites and their holdings that automatically updates itself constantly and can find any file, any time, anywhere. The first FIVE sites ARCHIE listed that we tried to ftp to in order to get the file - sported advisory screens that the ftp site had been moved to another machine and gave the new ftp address.

This while only a tiny percentage of the 17 million EXISTING BBS callers have any connectivity at all - and they ALL want it pretty badly. It may SOUND like you are the last person on earth without access to the Internet, but you're not. And while no one is talking about it, the congestion on the net during certain times of the day has reached the point we don't have a network - we have netlock.

I have this recurring nightmare picturing trillions of packets all hanging dead in mid-air waiting for one, just one packet, to move so they can all continue on to their destinations. And it all hinges on whether or not some 122 pound hunchbacked weenie in Coral Gables Florida can correctly claw a domain name into the keyboard of a 15 year old Apollo box in his basement. Peering out of his one good eye through a haze of Pall Mall smoke, if he miskeys a character, the whole thing evaporates and I'll wake up to find it's 1988 again.

The hope on the horizon is that the long distance carriers like U.S. Sprint, with their GlobalLink, and MCI with their Internet offering, can bail all this out before it goes bad. Perhaps...

And no, I don't want to hear from all the service providers insisting that none of this is true at THEIR site and that my host must not know what they are doing, etc., etc., ad nauseum. Have your customers tell me. You might find they see it differently.

It is the ultimate in irony, and thus eminently predictable, that all of this is occurring against one of the most exciting backdrops of our age. Almost everything you know about "limits" with regards to speed and capacity is on the verge of evaporating into historical quaintness. Two years ago the debate was over whether or not a Gigabit network was physically possible and how to engineer the almost unimaginable switching speeds required to support it. They're already on the shelf. And we're on the cusp of one of the largest leaps in technology ever contemplated - optical computing.

Vacuum tubes are essentially devices that control large flows of electrical current with small ones - the basis of amplification. The discovery at Bell Labs that you could do the same thing with a sandwich of doped germanium - the PN junction (transistor) was the enabling technology at the root of everything since then. A little over a year ago, Bell Labs again was the source of the breakthrough with development of an optical switch. It's precisely the same thing over again. We can use a little weak light beam carrying intelligence to modulate a larger powerful light source.

Why is this so important? Let's take our telecommunications system. A large percentage of it is already fiber-optic. But about every 25 miles or so you have to re-amplify the signal with repeaters. This involves conversion of a stream of light pulses to electrical signals which can then be used to control light from a new source. The conversion brings everything down to the speed of elec-

tronics. With a purely optical switch, there is no conversion. The result? Try a bandwidth in the 25,000 Gigabit range. And development of the optical switch to perform this very basic function is actually pretty close.

If you want to peer into the crystal ball a bit further into the future, most of what's inside your computer is basically a series of millions of transistors - tiny switches - layered into a microprocessor. Replace those with light switches using light as both the transmission medium and the switching mechanism, and again speeds go up by several orders of magnitude. Picture a 100,000 MHz Pentium. A crystal PC that starts to physically resemble the crystal ball we're peering into.

So I'm enormously excited these days about the technology frontier. The perception that we've "seen that, done that" is simply wrong. We AGAIN stand on the cusp of a new dawn in technology



that will again change the world, before we're even done changing it the first time. And it is disturbing to contemplate that it all might be mired down by "claw" down in Coral Gables - hip deep in water in the only basement in all of the Florida peninsula.

On the good news front, we are on the final countdown to ONE BBSCON in Atlanta. As of July 9, we already have nearly 1600 registered for this annual gathering of BBS operators, commercial services, and Internauts and we're not to our "doubling day" yet. Hotel rooms are already getting to be a bit of an interesting game. If you don't have one yet, now would be a good time to call somebody. The banquet Saturday night for the Dvorak Awards for Excellence in PC Telecommunications is shaping up as quite the event. In May, they put out some DOOR programs and other means

for submitting electronic nominations for who should get the awards this year. By mid-June they had over 100,000 responses I'm told. I hope they weed that down to a dozen or so or it will be a long evening.



We have over 140 educational sessions scheduled on the magic session board, and it looks like we may fill even the INFORUM's 100,000 square feet of vendor space this year - with all vendors vying to come up with the most clever promotions and show discount specials on modems, software, and other gee-gaws. It looks like Atlanta will be the focal point of the largest gathering of BBS aficionados in history - coming from some 40 countries to play with the technology and find out how to hook THEIR BBS to the Internet. From conversations with many of the software developers, I'm convinced this will be the first year real solutions in the way of shippable product will be there to allow what they want to happen. Let's just hope what they hook to isn't running at a net-crawl.

Jack Rickard
Editor Rotundus

JACK'S RECIPE FOR CORN FLAKES

This is a cunning little recipe I made up myself. After working all night at your computer, it makes a great snack just before bed at dawn:

INGREDIENTS

4 lbs. Kellogs Corn Flakes
1 lb. Sugar
1/2 gallon milk
1 cup Maaggi brand soy sauce

Pour the flakes in a large mixing bowl. Add sugar. Then add milk. Top with soy sauce. Don't over stir. Serve with CNN News or NPN Morning Edition. Feeds one if hungry and not too picky. Followup with a small serving of "beef-in-the-bottom" yogurt for dessert.

IN MY HUMBLE OPINION



Letters to the Editor

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Jack:

Thanks for the free sample magazine. I enjoyed it. Seems to be a lot of talk about the INTERNET this year in the magazine. I like the internet but it "feels" like what it is, a big mess cobbled together by a bunch of school teachers. Some of it works, a lot of it doesn't. Even DELPHI is hard to use, hence this message through CompuServe instead of DELPHI, the local access DELPHI number is screwed up tonight, no surprise there... Thanks again for the magazine, I like them and buy them from the newsstand once in a while.

Ron Skala
70172.3355@COMPUSERVE.COM

Ron:

I confess some attraction to your description of the Internet. "A big mess cobbled together by a bunch of school teachers..." But I might point out it got your message from you to me, which is what it is all about. I rather picture it as a bunch of University CompSci grad students who, while the debate on e-mail islands raged, snuck into the switching room and interconnected everybody while no one was looking.

Delphi's signing on about 42,000 new subscribers per month (and losing nearly that many as well I suspect). They had a little over twice that number total when they first offered Internet access a little more than a year ago. It's going to be a hot summer on the databahn I do fear. And a lot of people want to know more about this

"mess cobbled together by school-teachers..." While it may seem a recent phenomenon, we've been covering it since 1989. While the coverage has increased, there's been no change in editorial direction here.

Jack Rickard

Hey!

I just wanted to "congratulate" you on your article in Boardwatch Magazine about Digital Nation! You probably got alot of hate mail from the users here, but I think that your sentiments are EXACTLY right! If you want to know some really active boards, that aren't just filled with OneNet conference mail, check out Kaizen Online (301)621-4108, or even some of the small boards, that get more posts with 100 dedicated users than with 1000 plebians that think they are diehard-bbsers! DigitalNation has done less with more money and assets than any other so-called "service" that I know of!

Congrats!

Matt "dont let Bruce read this" Wondolowski :-)

Matt_Wondolowski@csgi.com

PS, why not print that article again? it holds even more truth a year later! The other admins in the metro area (including myself) would LOVE to see it again... just to burst dN's bubble!

Matt:

If Digital Nation has done something to raise such sentiments in other local sysops in the metro area, then it sounds to me as if perhaps they are finally doing something worthwhile. Maybe we should revisit it..

Jack Rickard

Jack:

Who the hell cares what the hell is an NVN?

Your "In My Humble Opinion" section of BoardWatch is the best section of the rag. I enjoy your diatribes and your sense of humor quite a bit. Like you, I've never heard of NVN, but I've got to ask you why you subjected your readers to 132 column inches of these idiots bitching about a magazine they don't even read.

Their ad this month was cute, but still not sure I would have caught it without having to read the 7 pages of NVN crybaby whinings. NVN should invest in presenting their service in a professional manner, (eg 4-color ads, screen shots, etc.) instead of encouraging their lemming-like users to babble on and on. Hell, you should charge them for an additional 7 pages of ads in the April/May issue.

Mark Graves

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Internet:

Mark.Graves@f187.n109.z1.fidonet.org

Mark:

Well, things were a little slow that month, and it was kind of cute. It detailed a "bombing run" by people who were totally unaware of what they were bombing or why. For our readers, it showed the regular progression from a ridiculous demand, a surly reply, the revolt of the munchkins, all in a three part set. It all rang a bell here.

At one point in the past, almost everybody online knew everybody, and now it's grown to where nobody knows anybody anymore and in fact there are entire segments lost in cyberspace with no Mr. Robot to issue warnings to Will Robinson. It's a little circular, but it caught my fancy.

Curiously enough, NVN pulled the plug in June. They had a board meeting at U.S. Videotel, we're told, and decided it was bleeding a bit too much red. A LOT of the activity on NVN seems to have been freebie accounts. The next morning, employees found themselves with severance and a non-disclosure agreement to sign and were gone the same day. The system displayed a message if you dialed modem that they would be up in a couple of weeks with a Windows interface. But it was dead. So I guess the question has moved from "What the hell is an NVN?" to more of a "Where the hell is NVN?" Oh well...that's life in cyberville...a couple of their sysops did step up after the close and tell us they were under quite a bit of pressure to get with the plan on the Boardwatch e-mail campaign.

Jack Rickard

Jack,

Just picked up the April-May Boardwatch and read your response to the folks who were giving you a hard time about not knowing what a NVN is. You made a comment about how so many of the sysops were female and why this is so. Answer: I don't know. However, I am one of the offline reader authors and I happen to be a woman. Would I be able to do something like this on Cserve, Prodigy, AOL, GENie, Bix, Delphi, etc.? I doubt it. So while I'd be decidedly out of my element on other online services, not so on NVN. NVN has really worked hard to make a place for women on their service and added many forums and topics that would interest women when Prodigy pulled the rug out from under the heavy user.

For instance, it has one of the most active machine knitting forums that I know of (don't EVEN ask what the hell is a knitting machine) in cyberspace (and men are always welcome) and I have yet to see someone flamed for asking questions whose answers are "obvious" to the men (or anyone else reasonably literate about computers ;=>).

Then today the Newsweek arrived and it had an article that mirrored your observations, which makes me now conclude that at least one of my parents was an alien. I am the person in this family that pops the case off the computer(s), is constantly upgrading the hardware and software, formatted my hard disk after having the computer for 3 months just to see how to do it. So apparently I don't fit the "mold" of typical female computer user.

I jumped into this scene rather late in the game as my husband (the computer systems/analyst) felt that computers were essentially "toys" until the 486 became available, so I had limited contact until we purchased one in November of '92. After discovering Prodigy by means of the free month, I became totally hooked on computers, email, and the capability of computers. I recently purchased a 50mhz DX2 multimedia machine and have a scanner, 2 modems, a dedicated phone line and 3 subscriptions to online services as well as 5 internet email addresses as well as the capability to hook the computer up to my knitting machine (whew!! Makes me tired to read it). My husband seems to be content with the slower 486, particularly after we got him a "real" modem.

Back in December I decided I wanted to learn to program, so I bought VB and the rights to MCIOFF, the windows olr used here on NVN, and have been adding an upgrade to the program at least every 2 weeks to the delight of an enthusiastic group of users (mostly men) who seem to at least admire my tenacity, and put up with my learning. Could I do this elsewhere?? I doubt it, but NVN is more like family and friends in a small town than anything I've ever experienced anywhere else in cyberspaceland. Sure, there's a pretty good group of guys on the MSBASIC forum on Cserve, several of which I correspond with regularly as well as a group I keep in touch with on Prodigy, but NVN is more like home.

You had an assertion that management was behind the letter writing campaign to you. That's not entirely true. Actually it was a user who suggested it, and proceeded to post to that effect in every forum on every topic. It has often been suggested that the Computer Shopper guys be written to also, so you needn't feel singled out by the loyal NVN users.

However, the management didn't *discourage* it either, so if you want to give them credit, so be it. You seem to have strong opinions about just about everything anyway (not being critical, just observant) and who am I to question where you got your information??

Amy Stinson (mcioff@nvn.com, astinson@nvn.com, amy.stinson@indy.com)

Amy:

I don't know yet how to break it to you people. It was a JOKE. We ran stories on NVN before there WAS an NVN - as you know it. I'm becoming embarrassed for you NVNers. We were smacking trooper George around for being a dipstick and demanding that we acknowledge NVN was essentially on par with CompuServe - which it isn't. You all didn't get it and launched the attack five totally clueless. It's been fun, but enough already.

But I was unaware of the high level of female participation in recent years on the service and it does pique my curiosity. There is no plausible reason why computers are not as empowering to women as to men and there never were. Grace Hopper was fossilized at a computer. Yet the numbers always seem a little one sided on most services - like 9 to 1. I get blasted by the femi-Nazis regularly as if I somehow personally caused it. I didn't, but it's very real,

and I'm curious what about NVN you found attractive.

Actually I am vaguely aware of machine knitters. Oh, I probably know a little more about it than I quite understand, true enough. But a friend's brother in law works for a firm up in Boulder that is one of the major vendors in this area. Apparently, you can hook up a PC to \$10,000 or so of equipment, and it will do some pretty amazing things in the area of embroidery and creating designs in textile. It would seem a fairly substantial group has fired this up as a home business of some consequence, and for some, apparently a decidedly profitable one.

Yes, actually I'm pretty sure you COULD do the MCIOFF thing elsewhere, but that isn't really the point. Something about NVN made you feel comfortable and inclined to do it, to a greater degree than on other services. This could be an important point for online services in general. The concept that it was real "friendly" is a little vague. When you were in the room with it, and it first started making friendly noises, what did they sound like? If it was because it was small and a close knit group of people, success will kill that most likely.

Enquiring minds want to know. Perhaps the rest of cyberspace could be made civil for participants of the gentler persuasion.

Jack Rickard

Dear Jack:

You noted on page 46 of your April/May 1994 issue that Delphi detractors criticize Delphi for its plain ASCII interface.

I hope you will remind readers that there are a lot of people out here who want a plain ASCII interface.

I have an 8088 laptop that works fine. I use it as a glorified typewriter and email exchange device. My Xywrite word processing software works much faster than I can think.

There are only three technology advances that could persuade me to upgrade, even if I had a lot more cash than I do:

1) the arrival of a laptop with a CD-Rom drive and a floppy drive and a built-in wireless modem for less than \$1,000;

2) the arrival of an equally capable, equally inexpensive laptop that can plug directly into my brain; and

3) the arrival of a computer with artificial intelligence that can do my writing for me.

If I did a lot of desktop publishing or designed complicated hypertext systems, I might want a graphical user interface. As it is now, I regard GUIs as a waste of time and money. They burn up computer power for no particularly good reason. They rely on a language of icons that is quickly achieving Chinese-like complexity. They drastically increase the complexity of the whole system, creating many new ways for the system to crash and many new places for worms and viruses to hide.

I picked Delphi and considered GENIE BECAUSE I could use an ASCII-based interface to reach them. If Delphi eliminated its ASCII-based interface, I would cancel my service.

Sincerely,

Allison Bell

ALLBELL@DELPHI.COM

Allison:

All good points. I think ultimately we will always have a large number of online services because many people do want different things not only in content, but also in interface. Each time we do something to the Boardwatch BBS, I am powerfully reminded by a basket of e-mail from a group of vision-impaired callers who want access to a group of text-based news products, and we've rearranged the furniture on them once again.

I still use XyWrite myself. But the graphical interfaces have captured the imagination of the majority of online users. And nothing need be given up. It is quite possible for Delphi to introduce a totally new graphics interface without making any substantial changes to the ASCII text based interface at all.

Jack Rickard

Jack:

Regarding your "Editor's Notes" on the obscenity convictions against the owner of a BBS in Oklahoma City in the June issue of Boardwatch Magazine ... I wonder if you are not overstating the case a tad.

In general, I think you are correct that the US has moved much further towards a totalitarian state than many realize. Almost every day, federal, state or local governments or their agencies remove more of our freedom of choice to act as we formerly did... for example, Affirmative Action, Quotas, Set Asides, American's With Disabilities Act, Civil Rights Acts and regulations by state and federal Civil Rights Commissions, Environmental Regulations that take private property without compensation, Family Leave Regulations (which I might note, are now being suggested by the administration that it be "paid" leave) politically correct speech codes, and the list could go on for pages... every time some special interest group, such as women or minorities etc are given special "rights" by law or regulations, it results in one less choice others have to act as they did prior to the regulation/law... a small but typical example.. contract set asides for minority contractors - non minority contractors are therefore excluded... another small example, but which could be multiplied into a thousand examples - handicapped parking places.. for each one, there is one less for non-handicapped citizens.

And I wholeheartedly agree that, more and more, law enforcement and regulatory agencies, are using the ever expanding body of criminal law and civil regulations to harass citizens to "keep them in line" with a political agenda... in that arena, we are rapidly approaching the system as it existed in Russia... you're example of search w/o warrant in public housing is right on target... and unfortunately for all of us, the current administration believes in government control right down to their toenails.

Having said that, I think you are beating the wrong horse (if you will excuse the mixed metaphor) in the obscenity matter. I am a little fuzzy on the facts, and they may be important here... I gather that the BBS owner was selling the adult CD ROMs through a separate business and the images were not available for downloading. If such is the case, I see little difference than selling hard core pictures at the local adult bookstore. I don't see where the fact that they were digitized images on CD ROM is distinguishable from, say, magazine images, other than the minor fact that one is easier to view than the other... if, in fact, the images were on the BBS and available for downloading... that is a different matter as

far as the legal issues and possible violations of federal law.

Let me say that I am a First Amendment absolutist and therefore believe that there should be no governmental exercise of censorship except in very limited circumstances, such as excitement to riot etc.

On the case in point, almost, if not all, 50 states have obscenity statutes. The US Supreme Court has clearly stated that "obscenity" does not enjoy First Amendment protection. I suspect the images that Davis was distributing were hard core obscenity. By the looks of the criminal counts, he was prosecuted under a garden variety obscenity statute, which has probably passed constitutional muster. It is not valid to complain that other crimes of a more serious nature have less penalties, or more technicalities that allow a lesser sentence.

Your thrust, instead, should be to change the penalties or wording of the offensive statute... remember, most criminal laws and penalties are enacted pursuant to public pressure and not at the whim of some police department or deranged legislator... and obscenity is clearly material that offends millions of Americans (even though they may secretly use it.. <g>)... and true, a highly motivated and organized group, such as Christian Fundamentalists, can get stiffer obscenity laws passed which the majority may not care a whit about, or may even disagree with, but, unfortunately, not to the extent that they will fight... we have a prime example in Colorado in the recent legislative session where an attempt was made to stiffen obscenity laws... and since it failed, you can bet it's supporters will get it on the next general ballot.. and my guess is it will pass handily.

So, Tony Davis may be the victim of a political crusade abetted by the police and prosecutors, but the fact remains he was apparently in violation of a constitutional criminal statute... the answer is to change the laws and eliminate the oppressive regulations... however, since that takes hard, hard work and putting one's neck on the chopping block, I am not holding my breath.

And, as an aside, I suspect that adult BBS will become a thing of the past, at least to the extent that they carry "adult" images for downloading... adult

EMail raises all kinds of different issues.

JOHN PILON

John:

From the points you raise, it would appear I rather understated the case. Most of the objections to this editorial were of "the law is the law" form you use, and I think miss the point entirely.

If we are in a situation where normally law abiding citizens are facing serious jail time for info-crimes, with not only Tony Davis's BBS, but many others across the country being shutdown and similarly threatened, concurrent with the burning of LA, gang wars and murder among children, and serial killers, then we don't really have a problem with adult images, electronic bulletin boards, or anything akin. We have a problem with a legal system completely awry. I don't want to reword anything. I don't want to talk to my legislator. What I was referring to was the conversion of our entire legal apparatus away from protecting individuals from crimes and maintaining civil order and into a much more active enforcement arm of the state dealing with taxes, state security, and political stance. I was finally KEYED to this by the act of learning a middle aged family man operating a productive business faces 35 years for selling CD-ROMS, not one of the crimes that terrify me personally and cause fear for the future of our nation.

You cannot eliminate all evil by state control, you can only concentrate it in the state. But you can eliminate all freedom, and conceivably most of the visible good, in the process. If we have reached the point where the sale of CD-ROMs is equivalent to a capital crime - we're there buddy. It's already happened.

Jack Rickard

Dear Jack...

Almost every letter written to you starts out with a little brown-nosing by telling you what a great magazine they think you have... so let me do the same ;)

Out of all the computer magazines I peruse, I actually READ all of yours. It's the most informative I've come across, when it comes to the technology that I'm so fond of BBSing and its possibilities. I started in BBSing about 12 years ago when I was 16, and

received a \$250+ CompuServe bill that I couldn't pay... it didn't take me long to discover FREE BBSs. Wow what a concept I thought it was! I never thought that so many things would have happened with the technology as it has, and will! And your magazine helps to open my eyes to more and more potentials.

I know you're not Gay, but I'm writing to invite you and your readers to call my BBS, Matchmaker Mecca, which serves as a place for Gays and Lesbians to meet, and chat with each other. Our 2400 baud number is 908/821-1684, and our 9600 baud number is 908/297-8796. I've included a File Number and Password for you to use, which will allow you to skip all the initial registration steps.

I'd also like to tell you a little bit about myself, and the SysOp experiences I've had. I'm sure you're a busy man, and I hope I don't bore you so much that you throw my letter in the circular file!

My first BBS was started about 12 years ago, and it ran on a Tandy CoCo, as we so fondly called our Color Computer's. That board was running with one line, a 300 bps modem, and two 320K floppy drives. It was running for several years... and I called it CCIE (CoCo Info Exchange). The software was written in BASIC, and modified heavily by me. The theme of the board was related to CoCo's and Star Trek (gee how nerdy it must have looked). It lasted about four years - and the equipment was upgraded to two 1200 baud modems, by the end of the board's life. I'm also proud to say, that CCIE was featured in a local newspaper, for a story on Bulletin Boards. I lost a lot of callers when I started running beta software that was written by a genius (literally, not sarcastically) friend of mine, Greg Miller. It was written in assembly (no, not C or PASCAL, but ASSEMBLY, on the 6809 CPU). It was called TCBBS, and it has almost all the features of TBBS... but it was bug-ridden, and Greg moved onto the Amiga, as did I. After purchasing an Amiga I started a BBS named The White House, on my Amiga. It was themed around politics and Star Trek (another odd mix?). This was run on more bug-ridden software, and I eventually gave up my dealings with Amigas and CoCos, altogether; although I still think the Amiga is a great system. My entrance into the IBM world began, after I graduated college and started a job as a computer programmer, using IBM's of course.

After purchasing my first IBM, I started another BBS using Wildcat software. Its title was Oz BBS, which was themed around The Wizard of Oz. But more specifically, it was a place for Gays and Lesbians to meet each other. It grew to four lines, two of which were 14.4K. But, being the technical person that I am, I liked to tinker with the computer and the BBS - so the board was often down. Callers lost interest, despite my success at getting FidoNet linked to the board, which I never thought I'd get working when I first started experimenting with FrontDoor! My members started calling a neighboring BBS titled Matchmaker Mecca (MM), which was running DLX. Oz BBS was taken off-line less than two years after I started it, while MM continued to boom. I gave up to the competition :(

I became friends with the SysOp of MM, back when he first started running the board almost 3 years ago. His board started with 1 line, and has grown to 9 lines. His method of success has primarily been focused around three things: 1) Use the KISS method (Keep It Simple, Stupid); 2) Keep the board up and running at all times, except for maintenance; 3) Provide a unique way to Chat and Meet other Gays and Lesbians. My friend's name is Nick, and he put a great deal of effort into modifying the base DLX setup, to make it run as it does today. His dream was to turn the BBS into a Prodigy type service, exclusively for Gays and Lesbians. I believe he would have done it, because he's always been an over-achiever. Unfortunately, he developed AIDS many years ago, and has since gotten worse. He was unable to continue running the board, and several months ago, he asked if I would take over operation of MM for him. I felt honored that he asked, and I accepted the offer. He is still most concerned about me sticking to the KISS method, and keeping the board running at all times. I learned the hard way, that these are usually requirements for a successful BBS.

Matchmaker Mecca still runs today, much like Nick designed it. And I've since begun researching several things. One of them, includes setting up an advertising section, where members can search for businesses that are Gay and Lesbian friendly. This is turning out to be quite a task, but should be rewarding when it's completely setup. I've also begun researching how I can connect MM to the outside world - primarily to allow more people access

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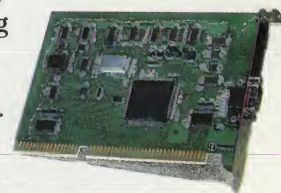
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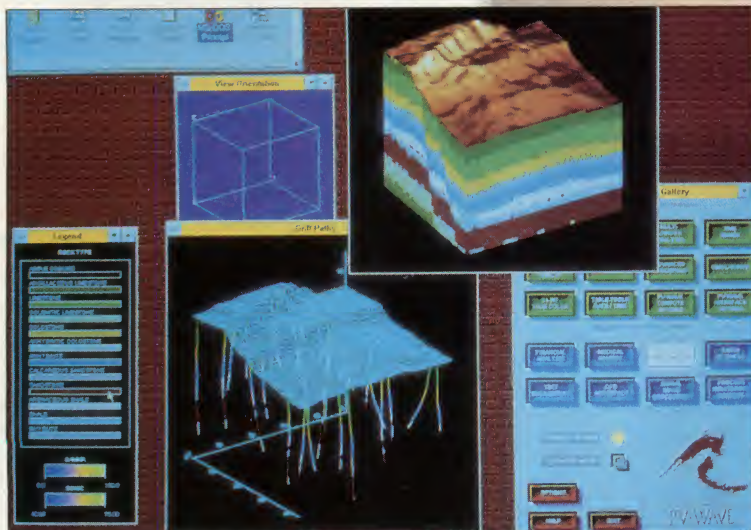
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to MM at a lower cost, and to provide more information for my members.

DLX is rather limited in connectivity... and the company itself is now out of business. In fact, the software, including the source code, is available for download on CompuServe in the IBMBBS forum (I uploaded it myself). It has been released to the public domain, and the author hopes that somebody will someday pick up the project and roll with it. However, I don't plan to wait for that day. I've researched other BBS software that I think would provide me with everything me and my callers would like, without having to change too much of the look and feel of Matchmaker Mecca. I have decided on TBBS/TDBS, using Ultrachat, TIMS, PIMP, and whatever else may develop. Ultrachat appears to be quite a nice piece of software, and it allows for all the functionality of DLX, plus a lot of extras. A TDBS program titled User Profile System is included, which give all the Matchmaker features of DLX, and of course lots of additional functionality. My congratulations to the wizards at eSoft for pulling all this off!

I have not yet converted to TBBS, but plan to at some time in the future. My personal interest is connecting to the Internet. But, most of my callers probably don't have an interest in the Internet, yet. I know as more people realize what's available via the Internet, they will begin asking for it. And I hope that your magazine continues to carry informative articles about the Internet. What I'd like to see in the future, is a comparison of all the major Internet service providers, and how they differ regarding their services, and value. Please consider publishing an article of this type, at some time in the future!

I could go on to type/talk more... but I can see from above that I've already been too long-winded.

My best regards to you and your staff,

Darren (File Number 2),
SysOp of Matchmaker Mecca
908/821-1684

Darren:

By golly a guy needs a little brown-nosing now and again - thanks. Interesting journey you are on friend. I think many of our readers will identify with some of its elements.

Jack Rickard

Dear Mr. Rickard,

I have been reading "BOARDWATCH" Magazine for almost four months now, and I have to say that I like it very much. It is light hearted and very understandable. If an article includes technical terms, your writers go out of their way to explain them in plain english. Your magazine is very easy to read, and has an air about it that makes you want to keep reading. This is a quality that most computer related magazines lack. You are also not afraid of controversy, you say something, stick by it, and if you are wrong you are not afraid to say so. If you have an opinion, you state it how you mean it, you don't try to smooth it over to please everyone. This is what I like about your magazine!

I was wondering what is going to happen with PGP now that ViaCrypt is selling a commercial variant inside a new version of WinCIM? Is the government going to try to ban this program due to the world wide service coverage of CompuServe, and thus the potential for this PGP version of WinCIM to be accidentally let out of the US? Or will they do what we have all wanted them to do, and un-ban the export of PGP? What is CompuServe's opinion on PGP within their service, do they want the controversy? I am very interested in the future of PGP, any and all comments you can give me on this aspect of the PGP debate or anything else would be greatly appreciated.

As you can see I am using PGP, have signed this message, and included my Public Key.

I have one more question for you.....are we related? As you can see my name is Damian Rickard, and I have relatives in Colorado as well. My uncle lives in Denver, my Grandmother in Pueblo West, and I have cousins, aunts, and uncles in Colorado Springs. Where does your family come from? Mine is originally from New York, Howes Cave to be exact. Does your family come from anywhere near that? I have a family tree tracing my Rickard side if you would like to take a look. This is interesting....

Thanks for your time!!

Damian Rickard

Damian.Rickard@cinbbs.sccsi.com
30 Teal Lane
Groton, CT 06340-2620

Damian:

To my knowledge, ViaCrypt is NOT selling a new version inside WinCIM, and CompuServe has nothing to do with it materially. They sell a version that works with WinCIM, and again to my knowledge, only sell it in the U.S.

ViaCrypt is just another distribution point for PGP. They put it in a package, they sell it for a price, and they have cleared all the patent issues. This makes it purchasable and usable by corporations, government agencies (oh, yes they do!) and others that can't really put the free version into play very well.

PGP 2.6 is also released, and described in our July issue just past. I think PGP has sufficient foothold at this point worldwide, that all the government mandates in hell couldn't blow it out of the water. Whether people are clinging to it simply because of the romance of its potentially forbidden nature, or whether they actually have any plans to use it someday, remains to be seen.

I'm originally from Cape Girardeau Missouri, and much of my family hails from thereabouts or originally from Illinois going back a bit. But they've bred widely, and apparently with some enthusiasm and can be found across the land in little obstinate pockets of Rickardism. If you find anyone of portly build holding forth loudly, at considerable length, and to some detail slightly beyond what they could possibly know about the subject at hand, you've probably found one. The daughter of one of my cousins does live in Boulder Colorado currently - no other relations in the state that I'm aware of.

Jack Rickard

Hi Jack ...

Whew I managed to get my new subscription into Boardwatch, JUST in time to see your article's on Telnet and the rest of whats happening on the internet.

As I'm sure by now you know that I run a PCBoard BBS here in South Africa. I have a LIVE internet feed to my offices, so I thought it would be GREAT to get people to TELNET into my bbs Whew this was a like trying to land a man on the moon. I must admit, the people I asked about getting my system Telnetable, were not really very helpful, in fact most were downright rude. Anyway the upshot of it all is that

Netline Flagship is the FIRST BBS in South Africa to be reachable via telnet.

I'm not writing to give myself a plug, but I am writing to you to let your readers and yourself know that this can be done.

We also run a full FTP / GOPHER and Telnet link from our PCBoard. This is how we have done it ... and to all those authors who would not help ... to bad here is the info :)

On the Telnet / Finger side, there is a magnificent door available from Mark Moorley. The file name is idtel17.zip (I believe boardwatch.com has version 1.4 online) This door works with PCBoard and allows one to have Telnet and finger access.

As far as giving my users FTP access was concerned ... that was another hurdle, that I had to overcome. I loaded up PC/TCP by FTP Software. This is a great implementation of a host of TCP/IP tools. However it is NOT BBS AWARE. So I decided to write a front-end for this system myself. I now offer full FTP access via my BBS for my users to the outside world. I use PC/TCP's implementation of FTP via my front end. My front end program does quite a few things, I will be making it available as shareware to the rest of the world shortly. It allows the sysop to setup a welcome FTP screen for the users ... ie telling them how to run the door. Then it passes the user parameters etc ... across to FTP.EXE. The program is quite neat in that should the user FTP files across from a site, it will automatically flag them for download, once the user returns to the board, and also move them over to a file area where other users can download them.

We also managed to get irc100.zip to be doorway happy. We just had to flag out setup files as READ ONLY. That works great.

As far as Telnet goes : I found an author who not only was helpful but also went so far as to put me on his Beta test team. His name is Brad Clements and he has written a product called Murkworks. It currently only runs on A novell network server, but is by far the best implementation of a telnet server for PCBoard that I have seen.

In a nutshell, we are still new to this whole setup, but I am learning as fast as I can. I get quite a few sysops asking me how to do this, so I thought by drop-

ping you a note I should catch all of them in one foul sweep.

Should you or any one of your readers want anymore information, I will be more than happy to give out what I have. I can be reached at the following addresses:

Telnet:fcsbbs.netline.co.za (196.7.3.154)
Email : ian@netline.co.za

I hope that this letter would at least help one or two sysop's who are desperately looking to go LIVE on the Internet with their BBS software. Once again Jack, THANK YOU for giving us the BEST BBS MAGAZINE AROUND.

Kind Regards

Ian Gerada

Ian:

Pleased to hear from someone so far away. The Internet puzzle is an engaging one. I am also very interested in Brad Clement's efforts at Murk-Wurks, some very solid stuff, but blooming later than I had hoped. It is my understanding he will be at ONE BBSCON to describe some further successes in this area.

Jack Rickard

Jack,

I could not have said it better myself! Thank you for having the "sand" to publish your comments and the unpublished comments of others who I will call the "thinking majority".

Unfortunately - I believe you are correct and having fought for our Government, I see myself arming AGAINST my current Government too. I never thought this day would come.

Aaron, Sysop
Shooters Corner BBS
703-242-1767

Aaron:

It's a hard thing to consider.

Jack Rickard

Jack:

Yeah, I know, I know. Why don't I have a subscription to Boardwatch instead of

running to the news stand. My local news stand almost always has an ample supply- if I get there fast enough.

I've been BBSing since the days of CPM, and have seen many mags about the joys of on-line. Yours is the best one I have found on this continent. I may browse, but I don't buy the mags that dare to call themselves competitors.

I am also ready to launch my own BBS serving primarily the interests of inventors, innovators, entrepreneurs and those interested in space and astronomy. By the way, I used Boardwatch as my sole research source when selecting my BBS package- The Major BBS.

My real reason for writing is to toss in my two cents worth on the war over commercialization of the Usenet. First, when will newcomers to the Net and the media, realize that Usenet is not Internet? It is a part of it, with separate constitutions governing what is allowed and not allowed in each newsgroup- at least in the moderated ones.

There has been so much acid comment generated on this topic, that if I could collect it all, I could clean every brick in my house.

Internet is basically e-mail, FTP, and Telnet and netters using those feature need never peek at Usenet. But they do, because the user groups are peppered with useful information pointing inquiring minds to sources through the core Net services.

Proponents for a non-commercial Usenet argue that since access to the Net involves expense- usually block time plus phone charges, they are being charged to receive advertising. Something like robo-faxes of advertisements to your fax machine on expensive fax paper you pay for, plus machine wear and tear.

The problem lies in the mixing of ads and what in a printed news environment would be called editorial. Some news groups on Usenet are running more ads than discussion, and that's the bone that makes no-commercial netters choke.

An equitable fix is to have one commercial area for every newsgroup where the commercial question is a problem. Not all newsgroups are weighted with ads. Many netters WANT to see press releases and advertisements. Let them read their commercial material without

treading on the holy ground of discussion.

Usenet participation is essentially "free". If there is no quick resolution to this editorial/ad problem, there is a very real danger that the commercial side of Usenet and/or the Net itself will fall into the hands of a few powerful conglomerates who, in the name of profit, will charge rates that effectively deny access to individuals, small businesses and entrepreneurs.

These idea-generators have been using Usenet (up to now) as a sounding board for products and services in the concept or start-up phase. Deprived of "free" forums to test their wares, many good ideas will die prematurely.

Granted, some Netters have been outright abusing Usenet by uploading electronic chain letters, fraudulent schemes and once in a while proposals so blatantly illegal, that it seems the poster is seeking lodging courtesy of the state. But their numbers don't warrant crushing all commercial material on Usenet.

Of course all the commercial material could be moved to FTP sites. But finding that FTP site is normally done through Usenet. I find Usenet has pointed me to more useful FTP sites than Archie, Gopher and WAIS combined- although I still use them when Usenet fails me.

There is a cost penalty to this approach. I access the NET through a provider that includes access to Usenet as part of a basic subscription. I pay extra for block time for the core Net functions- e-mail, FTP, TELNET, etc.

Ads that I could view for "free" through Usenet cost in block time when I must FTP or TELNET them. And because the sites may be far-flung, I seldom get all the throughput built into my high speed modem- which means I require more time on-line.

I don't ever recall being forced to pay for the flyers delivered to my door.

So netters, push for parallel commercial newsgroups in Usenet. If you are a Usenet purist, remember, nobody is forcing you to read the commercial material. You can configure your newsreader to pretend they don't exist. Let's stop the flame wars and solve this problem before Big Business solves it for us- their way.

Daveb.Edwards@Canrem.com (Dave Edwards)
Sirius Enterprises,
P.O. Box 730,
Barrie, Ontario, Canada
L4M 4Y5

Dave:

Yeah, why don't you? If we could get all 17 million or so BBS enthusiasts in North America to subscribe, Jim Dunmyer would have a BIG letters section every month, and we'd be in fat city.

I don't really know what to think of USENET. You're quite right to point out that USENET is a collection of distributed public message forums, with no real connection to the Internet. The Internet has traditionally been a major channel of distribution, but actually I believe the USENET began primarily in UUCP land, and its distribution channel is not really very relevant.

The discussion about commercial advertising in public message groups predates almost everything. I think it is coming to USENET strongly now largely based on size. As to the "paying to get advertising" over USENET argument, it is specious. You don't have to. You can disconnect. More than anything, USENET is an experiment in having rules, and not having them - a rather publicly shared forum without a captain. It exhibits the ultimate freedom of expression, along with all the flaws of the concept. It is interesting in that alone, and I for one don't want to do anything "about it."

The biggest problem it faces now is success. A full feed is running some 90 MB per day and more than doubling annually. How much mail can you read?

Jack Rickard

Jack,

I have to take this time to tell you a couple of things. First, I have never come across a person who is an editor of such a wonderful magazine that has the guts to explain the true problems that we here in the US are facing today. Bravo! Keep up the great work. I have read several of your editorials in the past couple of months and you have been right on track. I myself feel exactly the way you do. As an AVID Bircher, I know that not many people (and certainly not editors of GREAT magazines ie.. Media) will tell people like it

is. I think that you are to be commended for your truthfulness!

Second, I have to tell you how impressed I am with your magazine overall. Certainly the top of every Sysops list who wants meaningful information and excellent coverage of those things affecting BBS's around the country today! Brian's article about Ability Online shows how much Boardwatch cares! We here at the American Dream Information Network will count it a privilege and honor to offer your fine magazine to our subscribers online.

Thank you Jack and all you staff. Please keep up the great work, and I look forward to your next bulls-eye editorial.

God Bless!

Richard Sears
Sysop - American Dream Information Network
rsears@crash.cts.com

Richard:

Thanks for the kind words. Boardwatch actually isn't really about agreement. On any given issue most of our readers have a variety of positions, and whether or not we agree is largely moot, and whether they agree with me almost entirely so. We can examine some of the developments, postulate on what they mean and don't, and try to avoid drying out technical matter to the point it becomes unreadable. There is an enormous amount of romance attached to the birth and development of an industry - even a technical one. If we can bring some of that out, it becomes more pleasurable for everyone.

In any event, I'm pleased you enjoyed the read.

Jack Rickard

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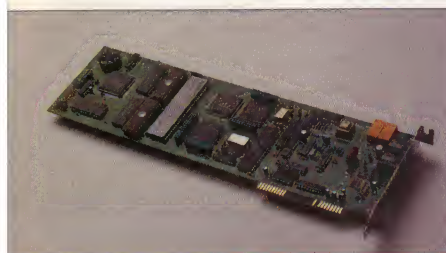
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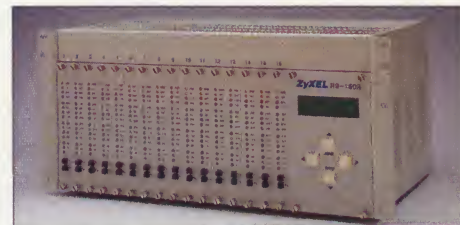
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WILDCAT! BBS VERSION 4.0

Three of the Boardwatch crew traveled to Bakersfield California for the weekend on June 10 - ostensibly to look over the new Wildcat! BBS version 4.0 from Mustang!Software!Inc.!. Actually, we wanted to see their new office complex, drink some beer and eat chicken at the barbecue they were hosting for Wildcat!sysops! to get a preview of the new release - and maybe check out some alarming rumors concerning the women of nearby Fresno. It was planned as an idyllic weekend away.

Turns out to have been a bit of work. Mustang has suffered some success in the past couple of years with their Wildcat! BBS software package and the QmodemPro terminal program. They

claim to have an installed base of some 30,000 Wildcat! bulletin boards fielding about a million calls per month, and some 80,000 users of QmodemPro. They sold nearly 11,000 copies of Wildcat in 1993. The event of June 11 was a kind of open house where about 150 Wildcat BBS operators and faithful ventured to Bakersfield to see the new wares and tour the new Mustang headquarters building. The company is reported to have paid some \$980,000 for an isolated campus-like building on Lake Ming Road outside of Bakersfield. We arrived in Bakersfield on Friday, to a city-wide power outage, and got some mileage out of the "final testing" wisecracks. It was a very warm evening in Bakersfield.

But Saturday turned out to be a full day of classes on the new 4.0 version - with air conditioning AND electrical power.

Instead of the tidying up of features we expected, this new Wildcat represents some significant changes in direction for the product, nearly 250 new features, and is described by the company as a top to bottom re-write. Whatever you thought you knew about Wildcat! - it's changed.

NOT THE SAME FOUR SCREENS ANYMORE

BBS software is unlike word processors, spreadsheets, or any of the other "categories" of software available. For one thing, we've never all actually agreed on what a BBS is, much less on what the software should do. Bulletin Board software packages are nearly enough operating systems or development platforms, and it is often the case that hundreds of add-ons, utilities, and additional programs are developed by the user base to extend the functions of the BBS. What a BBS is, and what features the software should embody, tend to revolve around what you think a BBS should do, and what you think should be done on a BBS. There may be a loose consensus, but this is still very much an emerging genre.

One of the more inflammatory questions over the years has centered around the user interface. The "common interface" camp eschewed complicated labyrinths of menus and byzantine services for a couple of standard operating screens with very standardized commands. F for files, G for Goodbye, etc. You could tailor the ANSI screen of the main menu, but the keys always worked the same way. This did let callers navigate a new system with some familiarity, and made it easier for software developers to write communication utilities that depended on certain functions being in the same place. But it also led to a suburban tract housing sameness to the increasingly vast BBS-scape.

The other school of thought held that the entire BBS should be the creative expression of the BBS OPERATOR - not the BBS software author. This view noted that BBS software should be a design tool properly in the hands of the owner.

I kind of knew how this one would come out. In the early 80's I wrote a program titled PROFIT PLAN that allowed you to generate various break-even analysis



functions on products. You could enter a variety of fixed costs, variable costs, and other loading factors to determine that at a certain price you would need to sell a given amount of product to break even. Or conversely, the price required to breakeven at a certain unit sales. Neat idea and in fact sold quite a few of them for the day. It was easy to use, but naturally, with each customer there came one more suggestion for how to improve it. My first hint.

And I was not alone. There were a number of people, even in 1980 and 1981, who were writing programs and all sorts of financial modeling programs were popular. Our collective view of programs and programming of the day caused all of this to appear rational. About that time Dan Bricklin's VISI-CALC program crested into popularity and the world changed.

Actually, I had written a spreadsheet - forcing all users to do it Jack's way. VISICALC empowered the user to do it HIS way - and it became a TOOL - rather than a PROGRAM. The difference is crucial. The entire personal computer revolution, and similarly today's communications revolution, revolves around empowering the USER - even if it equips him to do stupid things. You designed your own breakeven analysis, or whatever, using a spreadsheet. You could even make mistakes. You could do ugly, nightmarish things that could ruin your bid on an enormous construction job, causing you to lose millions of dollars. You could do things that didn't even make enough sense to cause damage. The power to create is the power to make ugly. But in every case, given a choice, computer users overwhelmingly choose software tools over software programs.



Wildcat! had been very much in the program camp. You ran Jim's four screens, and the company even had a paternalistic view of "their callers" wanting them to feel at home on any Wildcat! BBS they called. No more. With Version 4.0 Mustang has completely gone for the "BBS as a design tool" paradigm. Life will be more complicated, but much more powerful, for Wildcat! BBS operators of the future.

The tale starts with the basic BBS functions. There are approximately 52 things you can do on a Wildcat BBS - list files, read messages, go to other menus, enter a questionnaire, etc. Now, the sysop can assign any of them to any key on any menu he wants, and have as many menus as he likes, with one menu calling another up to 1000 levels deep. Your BBS can look very much like YOUR BBS, as pretty, or as ugly, as you can make it.

But the company has implemented something I've been raving about alone in the woods for years - basically a CAD program for BBS software design. Their **wcPRO** utilities let you design screens, set all options and display characteristics, and mouse about through a pictorial menu tree to see how it all fits together. At a mouse click, you can go view the screen as a caller would see it - even RIP graphic screens. You can logon to the BBS, even when there isn't one yet, and navigate about, then return to your design efforts to fix all the things that are broke. They make it look easy. **wcPro** is \$99 and also includes some fax utilities that will allow callers to fax themselves documents as easily as downloading files.

That represents an entire change in philosophy and a whole new Wildcat! BBS. But it isn't what pasted me to the wall in Bakersfield. Greg Hewgill, who we are assured will soon shave whether he needs to or not, has created an masterpiece of software they call the **wcCODE** - Custom Online Development Engine.

At \$149, **wcCODE** is a QuickBASIC compiler in an editor environment that looks like Borland's old TurboBasic. But think of it as a BBS BASIC. In addition to the full BASIC command set (never standardized but that's the idea), **wcCODE** also includes all RIP graphics commands, all 52 Wildcat BBS functions, some special functions to easily access message bases and user databases, and a few comm specialties as well. Anything EXISTING in Wildcat

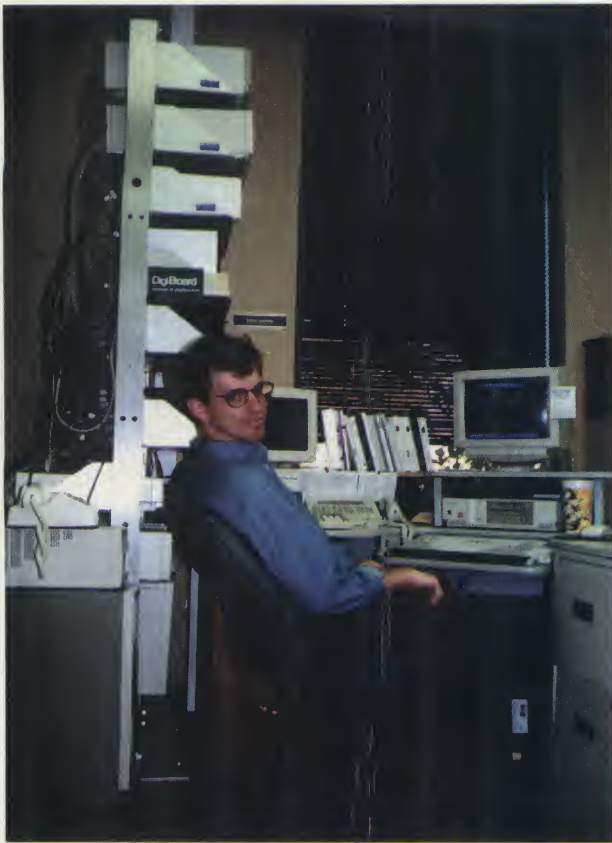


can be done from this program, and a lot more as well.

It compiles your code into **.WCX** files. The **.WCX** files can be run as events. They can be tied to any key on any menu so that when a caller presses that key, it runs the **.WCX** program. In fact, you can write a **.WCX** with the name **LOGON.WCX**, and from the moment the modem answers, your **.WCX** program is in control. Since Qmodem has a very similarly structured script language now, you could conceivably write an entire automated terminal function in Qmodem, and an entire comm server application in **.WCX**, and you don't actually have a Mustang designed BBS or terminal program in your way AT ALL.

We kept looking for the wall on this one. We can't find it. You don't need to EVER use ANY of Wildcat, you can design your own BBS from scratch. Or simply tailor a few things. The new model strains the terminology. Scott Hunter, trying to demonstrate the power of this thing to the attendees, variously referred to the programs as **wcCODE** applications, **.WCX** files, scripts, and repeatedly "doors" which has been the usual model for add-ons to Wildcat in the past. Finally, Mustang President Jim Harrer came to the front of the room bellowing that they were NOT doors and shouldn't be called doors. He then took a few questions from the crowd and in less than four minutes had himself called them doors three times. It's a change in thinking - even for Mustang.

.WCX files can also call DOS batch files, other **.WCX** files, etc. And they can reach into the caller database for example to fetch CALLER ID data stored there by the modem, or the



Sysop Steve Crippen at the Mustang Support BBS (805) 873-2400

message database to add or delete messages, search messages, etc. It is enormous power. But at the same time promises to be much more stable than conventional "doors."

While you need the \$149 **wcCODE** add-on to **WRITE .WCX** files, you don't need it to **RUN** them. Any Version 4.0 Wildcat can run a **.WCX** program. It looks like this will spur third-party development of programs and utilities for Wildcat into a mini-industry of its own.

INTERNET CONNECTIVITY

The question on many attendees' mind was on connectivity - primarily to the Internet. And many thought they were disappointed. They shouldn't be. It's in there.

First, the underlying infrastructure has been beefed up in some important ways for wider mail systems. The number of message areas or conferences supported was increased from a **1000** to **32,760** - it will hold all newsgroups for now by a factor of about four. Each message conference can hold **65,520** messages. The maximum size of a message was

increased from **150** lines to **64** kilobytes, and the variable size in the header for **TO** and **FROM** and **SUBJECT** was increased to **70** bytes each.

There was little mention of TCP/IP connectivity and we think we know why. Wildcat traditionally is a LAN based BBS. If you want multiple nodes, you use a Novell LAN with a Wildcat BBS on each node. Wildcat! does offer a Platinum version they previously called IM that allows up to 8 nodes per computer, but it is still heavily affiliated with Novell and LANtastic LANs. In fact, you can enter a Novell logon name in the user database, and Wildcat will go so far as to send a LAN message to that person's station notifying them they have mail on the BBS.

Brad Clements of Murk-Wurks in Potsdam New York had done an FTP Netware Loadable Module

(NLM) that allows you to connect a Novell Netware server to TCP/IP and the NLM makes an FTP site. He's taken an interest in connecting BBSs to TCP/IP by creating additional Novell NLM's for telnet, SMTP, gopher, WWW, and so forth. The telnet NLM for example, will allow people to logon to a BBS on the LAN - if the BBS supports a FOSSIL driver. Mustang somewhat quietly noted at the meeting that theirs does now. So we would look for Mustang to continue the affiliation with LANs to reach Internet nirvana, while beefing up some of the underlying infrastructure to allow it to make sense.

With regards to the more modest requirements of linking a Wildcat system to the domain name e-mail system via UUCP, they introduced a new product titled **wcGATE** that combines UUCP, QWK, and MHS mail into a single gateway. And it looked quite advanced over their earlier **wcUUCP** efforts. The new gateway not only allows Wildcat to send and receive UUCP mail and newsgroups in some quantity from a UNIX host provider, but actually to use several hosts, and actually they can now act as HOSTS as well - passing on newsgroups and mail to OTHER bulletin boards or callers.

This may be key. See our article this issue on WinNetMail.

They had previously had some difficulties with their UUCICO program to do this. They have since come to terms with Jorge Cwik and are using the FXUUCICO program that has become the performance standard in this area. We've reviewed this UUCICO in the past and consider it the best available for the DOS platform. With the new 64 KB message size limit, 32,760 conferences, and the large fields, Wildcat should do USENET and e-mail quite handily.

wcGATE is \$149, and it also supports porting mail to/from Novell's Message Handling System (MHS) e-mail format.

CALLER GOODIES

The new Wildcat! also offers some caller goodies that may be well received. Most dramatic was a GIF Thumbnailer. This program allows you to tag several GIF images. It will then assemble a single screen displaying each GIF in a small low-res version allowing you some concept of what you may be about to spend the next 10 minutes downloading. The size varies depending on the number tagged, down to quite small.

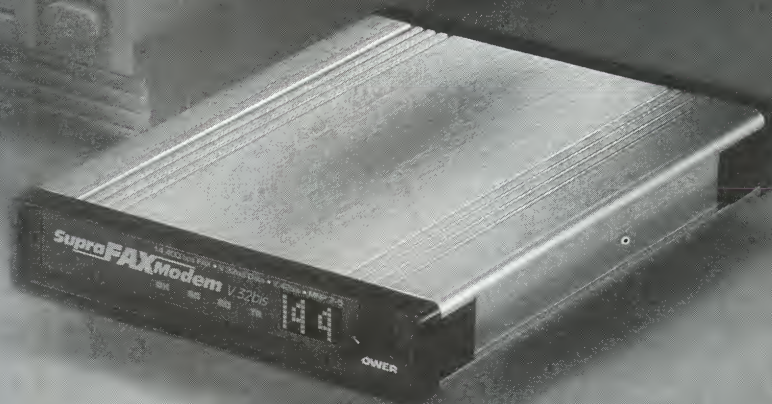
The message editor is shaping up very nicely. Full text search of the entire message base is supported with AND/OR/NOT logicals. The company bailed on the B-TRIEVE concept and went to a flat file messaging system with some very fast search algorithms. Searching may be a bit slower than previous versions, but you can search for more. And message tossing from networks like USENET are much, much faster.

Callers can now forward messages to other callers with comments. And the new editor features a built-in spelling checker. We do hope this feature finds wide use in the Wildcat! community...

Multilanguage support appears in this version. And despite the LAN nature of this beast, Mustang has made a serious run at upgrading their chat function. The new version supports 500 public channels and 1000 "action words." Action words are shorthand macros common to the system. You enter something like /VOMIT and the system issues something like "Dashing Warrior Spews Stomach Contents on Winsome Lass." The sysop can define each of

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Inside or Out, now you can choose the hot-selling SupraFAXModem™, technology that best fits your BBS. Either way, Supra can turn your BBS into a communications powerhouse!

Supra's faxmodems offer top-of-the line functionality like 14,400 bps fax and data, compression (V.42bis & MNP 2-5), support for Class 1 & 2 fax commands, and compatibility with Group 3 fax machines.

But SupraFAXModems don't stop there. We've enhanced the standard Rockwell modem technology. The revolutionary status display on Supra's external modems makes it easy for you to monitor online activity. The SupraSmart™ UART on the internal V.32bis faxmodem significantly enhances the potential for error-free transmissions.

Fall Back/Fall Forward technology lets the modem adjust to changing line conditions. And Adaptive Answer* recognizes whether an incoming call is fax or data.



Supra Corporation®

The Caller ID* option can allow positive identification of all callers without the normal tedious logon sequence. Prevent unauthorized entry due to lost or stolen accounts and passwords because the BBS can know exactly who's calling.

And Supra offers qualified Sysops an "insider" price on both internal and external faxmodems. Choose the faxmodem that's right for you and call Supra's BBS (503-967-2444) or 1-800-727-8772 today for more information.

MODEL	RETAIL PRICE	SYSOP PRICE
SupraFAXModem V.32bis external with Caller ID	\$379.95	\$149.95
SupraFAXModem V.32bis internal with Caller ID	\$299.95	\$129.95

CALLER ID
AVAILABLE NOW

* Adaptive Answer and Caller ID require software support. Caller ID also requires service from the local telephone company.
7101 Supra Drive S.W., Albany, OR 97321 USA • 503-967-2410 • Fax: 503-967-2401 • All trademarks belong to their respective companies.



these to be whatever they like. There is also a built-in profanity filter.

For high-speed modem support, the maximum serial port speed was increased to 115.2 kbps.

The most controversial element of Wildcat is that all passwords in the userlog are now encrypted. And there is no way to decrypt them. The sysop can't tell what anyone's password is and there were howls of rage from the attendees at the conference over this. But Jim Harrer and the crew were pretty adamant about it. Once a password is entered into the user database, it's a secret from EVERYBODY - even the sysop.

The reasons given for this unpopular move were ostensibly that in many organizations the BBS is simply a node on the LAN and if anyone can get in to the user database and read passwords, there is a security problem. The actual reason probably goes beyond this. Mustang itself has had a couple of instances of employees leaving the firm, and later dialing in as one of the OTHER employees with their password to erase hard drives and other mischief. Actually, we've had the same thing happen at Boardwatch. Unless you want EVERYBODY to have to change passwords every time an employee leaves, it's a bit of a problem.

The most common complaint is that callers lose their passwords and call the sysop to find out what it is. How can they do that? Actually, we don't think it's a problem. If a caller calls in and wants to know what their password is, the sysop can simply ask them what they WANT it to be, and key it in about as easily as look it up and tell it to them. You can still CHANGE passwords, but you can't see what they are after they are changed.

A final cunning little thing we noticed - and have had problems with ourselves, is duplicate caller entries. Human names are just distinctive enough for survival in a very local geographic area. In the wider world of cyberspace, they barely work at all and this is just becoming apparent. The number of "Michael Johnsons" in the typical BBS user database - even for fairly local small systems, can become astounding. Of course, only the FIRST Michael Johnson actually gets to be Michael Johnson. The rest have to be M Johnson and M. Johnson and Mjohnson1 and Michael X. Johnson and so forth. The Wildcat system now has a

caller identification number. And you can all be Michael Johnson. If there is more than one, the system displays all of them, along with where they are from and their user id. You can then pick one - ostensibly the one that matches the password you know. Alternatively, you can simply logon with the user id.

Mustang Version 4.0 is **\$129** for the single line version, **\$249** for a 10-user version, **\$499** for a 250 user version. Then they have their Multiline Platinum version which will allow you to run up to 8 lines per PC using Digiboard smart serial boards, and you can LAN the PC's together to serve up to 250 users - at **\$799**. With the **wcPRO**, **wcGATE**, **wcCODE**, and so forth, it has all become pretty unbundled to the point of confusion for some companies that just want a BBS that does the whole works. So Mustang has introduced what they call a **BBS Suite** at **\$999** - all of it in one box. In this way, the hobbyist can pick up what pieces they need, as needed. But if you want to avoid the 20 questions and resulting 65 answers to each, the BBS Suite covers all the bases - and at **\$999** - a pretty good discount from picking them a piece at a time.

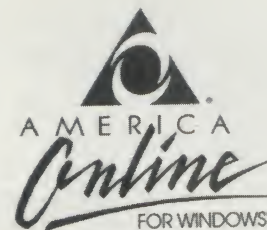
Version 4.0 represents a significant change in direction for Wildcat! and a major upgrade from previous versions. Whatever you thought you knew about Wildcat! is probably wrong at this point. We think it's moved this package, always an easy install and very LAN friendly, into the power user/system designer class suitable for any serious online application.

Oh...and anything you may have heard about the babes in Fresno - true. Mustang Software, Inc., PO Box 2264, Bakersfield, CA 93303; (805)873-2500 voice; (805)873-2599 fax; (805)873-2550 BBS.

AOL & TNPC JOIN FORCES

The National Parenting Center and America On-Line have joined forces in launching a service that features a comprehensive library of parenting advice and support. AOL members can now access an extensive database of hundreds of columns written by some of the most respected names in the field of child-care.

Categories range from pregnancy through adolescence and address subjects from toilet training tips and better teenage communication, to



teething and tantrums. Another feature of the new service is the Parenting Forum where parents can exchange ideas, or ask questions of the expert panel of The National Parenting Center. Additionally, each month America On-Line will host a live discussion where members can join a question and answer forum with individual parenting experts such as Vicki Lansky, Thomas Armstrong, Ph.D., or Alvin Eden, MD.

The National Parenting Center which is also noted for its consumer award program, The Seal of Approval, is featuring The Parent/Child Development Store, a shop at home service online where members can browse and make purchases of some of the finest child and parent related products on the market today.

TNPC president David Katzner explains, "We're thrilled to be able to bring our parenting support service to the members of America On-Line. To be able to reach so many people, directly in their homes with the advice and information they need helps us to achieve our goal of supporting families and promoting positive parenting."

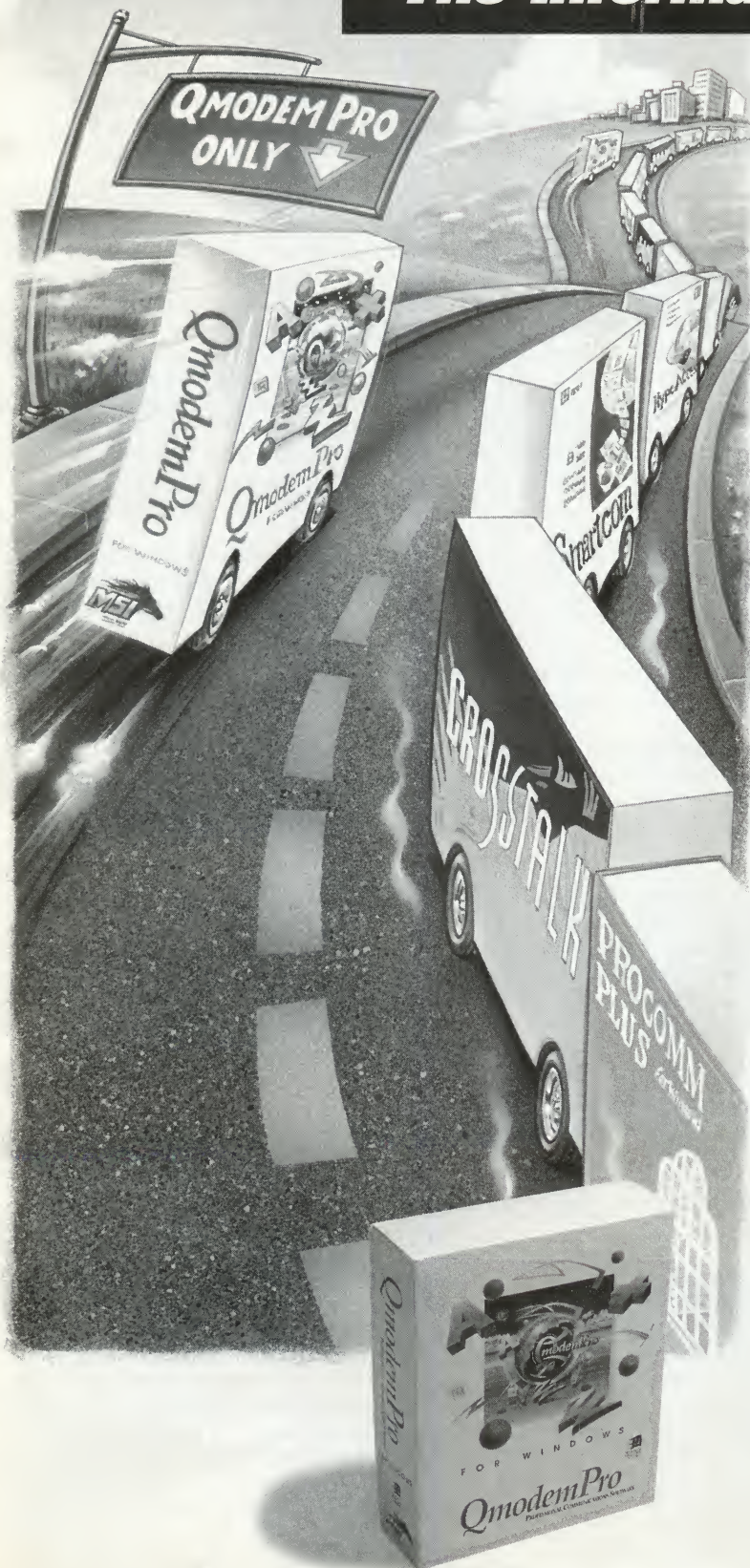
ZIFFNET PROGRAMMERS' COOKBOOK

ZiffNet Online Service Offers Cookbook to Raise Funds for Slain Member's Family

ZiffNet, the online information service about personal computing, announced in June availability of *The ZiffNet Cookbook: Recipes from the Digital Diner*. The cookbook was created to raise funds for the family of David Alsborg, a ZiffNet member who was killed in December by a stray bullet during a robbery in New York City. ZiffNet and CompuServe members can access the cookbook by typing **GO COOKBOOK**.

The ZiffNet Cookbook was compiled by ZiffNet staff members, headed by

Think Of It As The Fast Lane On The Information Superhighway.



QmodemPro for Windows by Mustang Software zooms past the competition. With no roadblocks in sight. This feature-filled, power-packed communications software makes it easy for Windows users to dial into BBS systems. It's the first program to support both data and fax communications from a single phonebook. With a modem that supports adaptive answering, you can receive both fax and data calls while in Host Mode, a limited-feature BBS program that lets you set up your PC to receive incoming modem calls. You can also send a fax directly from any Windows application using the QmodemPro for Windows printer driver. It's easy. It's all in one integrated package. And it's available now.

QmodemPro for Windows is the first Windows product to support RLPscript graphics, so you can plug into the thousands of BBSs offering graphics and full mouse support online. It also has more than 30 of the most popular terminal emulations, 10 built-in file transfer protocols including Zmodem, CIs B+ and Kermit, plus up to 40 programmable macro buttons. QmodemPro for Windows also lets you associate icons to each entry in your dialing directory, so you can create a true Windows phonebook. Each phonebook entry tracks up to 5 numbers, and groups of entries can be saved and dialed.

With QmodemPro for Windows, file transfers are made easy with features like drag-and-drop uploads from the Windows File Manager and live .GIF file viewing during downloads. The built-in .GIF viewer lets you zoom .GIF and .BMP files, or mark and copy portions of the picture to the Windows clipboard. You can put the Windows multitasking environment to work: use it to transfer files in the background while you work in your word processor or spreadsheet applications, or get in a few quick games of Solitaire. No other communications software does Windows like QmodemPro.

QmodemPro's new script language, SLIQ, gives you unparalleled power, speed and flexibility. With the AutoLearn feature, you can let QmodemPro record your scripts automatically without having to learn how to program. SLIQ scripts are compiled for fast, secure operation, plus we include a powerful script debugger and text editor.

QmodemPro for Windows also supports sound cards, so you can play your favorite .WAV file automatically when you connect to a BBS, and during other events like a successful fax transmission.

Whether you're a BBS beginner or a seasoned modem user, you'll find QmodemPro for Windows to be a flexible, easy-to-use communications tool, with twice as many features as competitive products. And at a better price: only \$99 retail.

(DOS version also available)

If you want to get on the information superhighway, don't get stuck in the slow lane. Move ahead fast with QmodemPro for Windows by Mustang Software.

**Available Now
At Software, Etc.,
CompUSA And
Finer Software
Retailers
Nationwide.**

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800-807-2874**



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Katherine Prouty, editorial forums manager, to gather funds for Alsberg's three-year-old son Mark, as Alsberg did not have life insurance at the time of his death. Ironically, just prior to his death, Alsberg was involved in online discussions where he passionately argued for gun control.

"Alsberg was an active and vibrant ZiffNet member," said David Shnaider, vice president and general manager of ZiffNet. "The cookbook is an expression of how the ZiffNet community valued David's thoughtful and committed participation. We are pleased that so many people contributed." Some industry notables who contributed recipes include Eric Hippeau, chairman of Ziff Communications Company, Barry Berkov, executive vice president of information services at CompuServe, Bill Machrone, vice president, technology at Ziff-Davis Publishing Company and Ed Belove, vice president, software at Ziff-Davis Interactive.

The illustrated cookbook contains 140 recipes contributed by many ZiffNet members and Ziff-Davis Publishing employees. Members were encouraged to include anecdotes and reasons why they contributed a recipe, resulting in a variety of time-worn family favorites, recipes from around the world and creative originals. For example, kicking off the Desserts section is a recipe for oatmeal chocolate chip cookies, including "coded" instructions for programmers, such as `"Tblsp *rolled_oats = malloc(sizeof(Tblsp);"` to mean one tablespoon of rolled oats.

Recipes appear in the following categories: Meats, Poultry, Seafood, Breads, Casseroles, Souffles, Pasta, Vegetables, Side dishes, Desserts, Breakfasts, Chili, Soups/Salads/Sauces, Appetizers and Dips, plus a ZiffNet exclusive recipe section for extremely hard-working professionals — dishes requiring only goods from vending machines and mini-refrigerators. The section also includes an authoritative guide to stocking mini-refrigerators.

The ZiffNet Cookbook is available to ZiffNet and CompuServe members in Windows Help format and ASCII by typing GO COOKBOOK. The cookbook is offered as shareware and carries a \$5.00 registration fee if used. Under the CompuServe Standard Pricing Plan, downloading the WinHelp version of the cookbook will cost about \$1.00 at 9600 bps and about \$2.00 at 2400 bps. ZiffNet and CompuServe are donating

all connect-time and shareware proceeds to the fund for Alsberg's son. ZiffNet encourages the distribution of the ZiffNet Cookbook to local BBSs, other online services and Internet sites. Other contributions can be made by writing to: "The David Alsberg Trust," Peter Alsberg, c/o James V. O'Gara, Kelley Drye & Warren, 101 Park Avenue, New York, NY 10178.

ZiffNet is a product of Ziff-Davis Interactive, the leading publisher of electronic information about computing. Formed in 1991, Ziff-Davis Interactive (ZDI) is a division of Ziff-Davis Publishing, the leading publisher of information about computers and computing. The company's publications include PC Magazine, PC/Computing, PC Week, Computer Shopper, Computer Gaming World, MacWEEK, MacUser, Windows Sources, the recently announced Computer Life, and the joint-venture with Disney Family PC, as well as seven publications in Europe.

ENHANCED FIRSTCLASS CLIENT FOR NEWTON MESSAGEPAD

Black Labs, Inc. of Boulder, Colorado, announced an enhanced version of FirstClass Retriever, a Newton MessagePadx client for the popular FirstClass e-mail and conferencing system from SoftArc Inc. of Scarborough, Ontario, Canada.

FirstClass Retriever allows users to automatically retrieve, read and reply to mail from remote FirstClass servers using a Newton MessagePad with either internal or external modems, modem-emulating wireless transceivers or a wireless local area network.

New features incorporated into Retriever 1.1 include networking support for operating Retriever over Appletalk, the ability to browse folders in the user's mailbox, automatic retry on connection busy, and new mail notification.

FirstClass Retriever operates in two modes: Connect and Xchange, corresponding to the two most frequently used modes for electronic mail systems. In Connect mode, the user can selectively read and respond to messages while online with a FirstClass server. Xchange mode is used to minimize phone connect costs, allowing the user to quickly download messages for later

review and upload messages created offline in batch mode.

In Connect mode, the user logs on and retrieves a message list by simply tapping on the Connect button. Once the message list appears on the screen, the user simply taps on messages he wants to download and view. While viewing a message, the user can choose to Delete it, Reply to it or Save it permanently in his MessagePad. The user can also download selected messages, log off from FirstClass and view these messages at a later time.

Xchange exchanges mail between the Newton MessagePad and the host system automatically. In Xchange mode, the MessagePad is automatically connected to the host system, all unread or a preselected number of unread messages (user definable) are automatically downloaded from the FirstClass server and unsent mail destined for that host system is automatically uploaded. When downloading and uploading are complete, the user is logged off the FirstClass server.

Other features of FirstClass Retriever include support for connections to multiple FirstClass systems or the same system from different locations and support for off-line message creation. When a new message is created off-line, the user is asked to specify which FirstClass system the mail is destined for. When an Xchange session occurs with that FirstClass system, all unsent mail destined for that FirstClass System will automatically be sent.

More than 800,000 people around the world use FirstClass for mixed-platform network e-mail, conferencing and online communication. More and more organizations are choosing FirstClass over traditional e-mail products such as Microsoft Mail, cc:Mail or even groupware such as Lotus Notes.

FirstClass Retriever is the first of a series of software retrievers and browsers for the MessagePad from Black Labs. "By creating a series of products targeted at different host systems, Black Labs can give each product the unique feel of the host system to which it connects, provide optimized and reliable operation for that environment and price the product economically. In addition, the memory requirements are minimized allowing use of the MessagePad with PCMCIA modems," said Doug Swartz, Black Labs President. Watch for announcements of MessagePad remote retrievers for

Full Text Searching . . .

Need to add powerful full text searching to your corporate BBS? Cheetah is the solution!

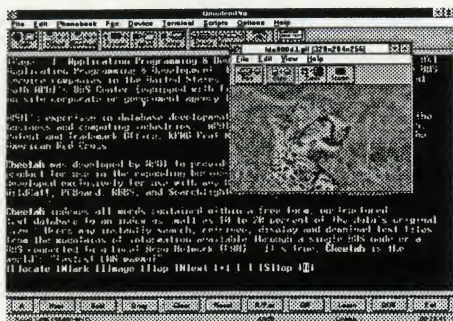
Cheetah was designed by APDI, a leader in corporate BBS consulting. APDI listened to corporations, associations and government agencies who need simple full text searching software to work with their BBS.

The search features of Cheetah include:

★ Boolean ★ Phrase ★ Proximity

Most types of searches can be performed in a matter of seconds even with gigabytes of text.

Cheetah was specifically designed for BBSs. The software keeps track of users' time left on the BBS, mode settings, modem status and even allows users to download their search results using any compression software they choose.



Cheetah handles text and images - newsletters, magazines, even government regulations!

Cheetah is available in serial port, Fossil and Digiboard versions and works out of the box on Novell Networks. Cheetah comes with an unlimited user license per BBS.

NEW Cheetah 1.5 version now shipping

- Images, GIF files
- Menu-driven maintenance program
- Document date support
- Usage reports
- Sysop configurable menus
- Unlimited hit lists
- Auto open databases
- Search multiple databases

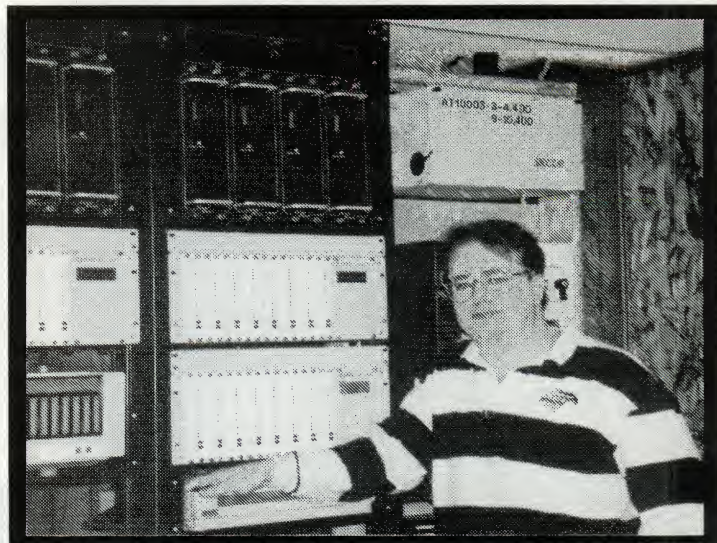
Cheetah 1.0 can be purchased at 50% off while supplies last.

So if you work for a corporation, association or government and run a BBS, or just have the task of building one, call APDI at 1-800-785-APDI (1-800-785-2734) and find out more about Cheetah's ability to give your users what they need.

SEE US AT:



BOOTH
#223



Mark Burnett at APDI's BBS Service Bureau.

"The BBS Service Bureau"

Companies looking for a serious BBS company to provide a wide range of services are choosing APDI. APDI is devoted to providing professional BBS services to corporations, associations and government agencies throughout the United States.

Typical APDI clients are organizations that need turnkey BBS solutions or advanced technical support. APDI provides installation and support for WILDCAT!, GALACTICOMM, PC BOARD, TBBS, and SEARCHLIGHT. APDI is a Certified Mustang Software Integrator (CMSI) and a Galacticcomm, Ambassador Dealer.

Most of APDI's corporate customers find it advantageous to let APDI run the BBS for them at APDI's location. APDI provides all equipment (like the BBS center shown above) and handles all technical support and navigation issues on your BBS. APDI's fiber-optic cabling ensures crystal clear connections and communications to your bulletin board system.

Many businesses wish to add a database to their BBS but find it difficult to locate programmers with the skills to assist them. APDI has a skilled database development staff and is on the FoxPro and Paradox development teams.

Now APDI can put your BBS on:

- Internet • X25 Packet Switching Network

Call and find out why so many of the largest corporations in the world dial into an APDI BBS every day!



Application Programming & Development, Inc.
6805 Coolridge Drive, 2nd Floor
Camp Springs, MD 20748

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A NEW CAT'S THROUGH THE

The king of the jungle has done it again: Wildcat! 4 by Mustang Software. By listening to you, our valued customers, Wildcat! has become The World's Most Popular BBS Software™. Now, we've given

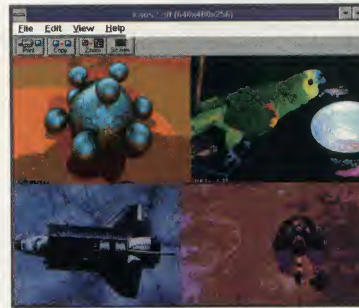
Wildcat! 4



Wildcat! even more to roar about with more than 250 new features and enhancements. See for yourself why Wildcat! has become the BBS product everyone's talking about. And learn about the new features that our competitors won't have for months to come.

POWERFUL NEW FEATURES

GIF Thumbnailer. Before downloading multiple .GIF files, your callers can download a thumbnail preview, which allows them to get a true idea of what the .GIFs contain without relying on the description.

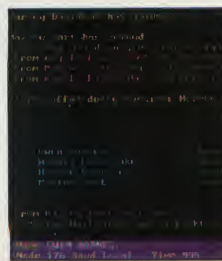


Online Spell Checker. Your callers will appreciate the ability to spell check their text before saving their message. We've also added search and replace, block cut and paste, and a host of

other new word processing features, which makes this the most powerful online full screen editor in the industry.

Online Scrollback and Capture. Now, Wildcat! Sysops can scroll back through the user's activity while they're online, without interrupting the caller. You can also turn on a screen capture file, which will record the entire session to disk.

Powerful and Fun Chat System. Your callers will enjoy Wildcat!'s entirely new Chat system, which features public and private channels, sysop-definable action words, and even moderated channels. We've also added goodies like multilingual support, profanity filter, alias names, squelching, and a whole lot more.



PROWLING ONLINE JUNGLE.

Tame Wildcat! to Your Specific Needs. Wildcat! Sysops will be able to customize Wildcat! by running any wcCODE application. Available as an option, wcCODE is our new Custom Online Development Engine that's an easy to use, Basic-like programming language that gives you access to Wildcat!'s internal structures and commands. These applications run directly from Wildcat! 4 without using a Door interface.



Free Form Menu Structure. For the first time, Sysops can create hundreds of menus and place any Wildcat! feature or wcCODE

application on any menu, in any order. You can create simple, time-saving shortcuts like Read All Un-Read Personal Mail as one menu choice or Download ALLFILES.ZIP right from the main menu. And making these menus is a breeze with our new MAKEMENU utility, included with every Wildcat! 4.

Multiple Language Support. BBSs have become global, and Sysops need to support multiple languages. You can now create a variety of language files from which callers can select prior to login. Even Chat has multilingual action words so you don't ignore your international callers.

READY TO GO HUNTING?

With its new technology features and enhancements, Wildcat! 4 outpaces the competition and moves easily into the new world of global communications. It's available in single and multi-line configurations. And with our popular add-on products like wcCODE, our Custom Online Development Engine; wcPRO Utilities, a powerful statistical and analytical package; and wcGATE, our Internet and MHS Gateway, all written and supported directly by Mustang Software, you see feature-for-feature that Wildcat! 4 is the best value in the BBS market. And the only way to navigate through the online jungle. Cage a new Wildcat! 4 today.

INTELLIGENT ENHANCEMENTS

- ▶ **Expanded File & Message Conferences.** Wildcat! 4 supports up to 32,760 File and Message Conferences, which gives you room to grow.
- ▶ **Super-Fast Message Databases.** With speedy, new databases, moving massive amounts of messages in and out of Wildcat! has never been faster. Let your BBS spend more time handling calls and less time tossing mail.
- ▶ **Expanded RIP Support.** Customize any Wildcat! prompt with your own personal RIP screen or use our default RIP screens included with the program.
- ▶ **Automatically import your file descriptions.** Wildcat! 4 supports FILE_ID.DIZ and DESC.SDI, saving you and your callers time while maintaining better descriptions.
- ▶ **Flexible Modem Setup.** Our improved wcMODEM utility makes modem setup a breeze. Supports all v.FC, v.34, v.32 terbo with intelligence to handle any new modem which appears on the market in the future.
- ▶ **Improved Message Handling For Internet.** 64KB messages give you over 800 lines of text. We've also expanded our message headers to support up to 70 characters for those long Internet addresses.
- ▶ **Duplicate Name Support.** Your BBS can now handle common caller names like Jim Smith and allows you to have common files like PKUNZIP in multiple file areas.
- ▶ **Local Sysop Node Support.** Now you can perform maintenance while callers are on-line, even in our Single Line version.

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Compuserver and Unix environments coming soon from Black Labs.

FirstClass Retriever is priced at \$69 retail and is shipping now. All purchasers of Retriever 1.0 will automatically be upgraded to 1.1 free of charge. A subsequent version, FirstClass Retriever+ will be released within 60 days and will offer all the features of FirstClass Retriever plus the ability to navigate FirstClass conferences. FirstClass Retriever+ will retail for \$99. Until FirstClass Retriever+ is shipped, all FirstClass Retriever purchasers can purchase a Retriever+ upgrade for \$20. Black Labs, Inc., 3613 Sunshine Canyon, Boulder, CO 80302; (303)938-8580 voice; (303)938-8546 fax; Blacklabs@aol.com

ITU V.34 MODEM STANDARD FOR 28.8 Kbps APPROVED

The long awaited V.34 modem standard for 28.8 kbps links was formally approved June 9 at a meeting of the International Telecommunications Union Study Group 14 in Geneva Switzerland.

According to Dale Walsh, U.S. Robotics vice president of advanced development and a member of the committee, the June meeting was mostly a formality. "All the technical issues were worked out last December after the meeting in Dublin. The rapporteur's group meeting in Orlando was to firm up the actual text of the specification, and explain some elements that needed further explaining."

About 30 administrations were represented at Geneva. A unanimous vote was necessary to put the V.34 adoption on the "accelerated" approval path. Other members have 90 days to comment and a 70% majority is needed to ensure adoption. But V.34, for all intents and purposes, has been approved.

The entire process for V.34 took nearly three years. In the interim, a number of "early" versions of modems with many of the features of V.34 were produced. The most successful was the Hayes/Rockwell V.Fast Class or V.FC modems. Although very similar in technology to V.34, they will NOT be signalling compatible with V.34. The final V.34 included a 4-dimensional 64-state trellis coding not used in V.FC, a V.8 start-up sequence said to ensure V.34 startup quickly, and some minor

changes in the way rate renegotiation occurred.

The result, inevitably, will be a scramble to upgrade V.FC modems to V.34. A number of vendors had foreseen this and several FLASHROM upgrade schemes have been devised for vendors such as Supra, U.S. Robotics, and more. But even these software upgrades may take a couple of months to produce.

LEFT HANDED KEYBOARD

The left-handed monkey wrench joke has finally come full circle. Christopher D. Licata, a New Jersey CPA, has invented a left handed computer keyboard. We can't imagine how the arrangement of keys would make any difference to southpaws, but he's done it. The numeric keypad and cursor keys are placed to the left of the normal QWERTY key layout. Invention World Corporation, 22 Walter Street, Pearl River, NY 10965; (914)627-3500 voice; (914)735-7872 fax.

COMPUSERVE GATEWAY FOR MICROSOFT MAIL

Users of Microsoft Mail can now port e-mail to the CompuServe online service, and from there to anywhere via Internet, using the MS Mail Driver. MS Mail Driver effectively turns Microsoft Mail into a mail front-end for CompuServe. And all file attachments/multimedia content makes the trip just fine, as long as the recipient on the other end also uses compatible software. The MS Mail Driver is available for download from CompuServe at a \$5 fee - GO CISOFT.

HAYES TO ENTER VIDEO CONFERENCING MARKET

Hayes Microcomputer Products, Inc., announced in late June plans to deliver a personal videoconferencing product to PC users that will leverage high speed modem or ISDN communications technology to deliver desktop quality video applications.

In order to increase Hayes' technology base in videoconferencing, the company has formed a business alliance with Workstation Technologies Inc., developers of the first color videoconferencing solution to operate over a single standard telephone line.

"High-speed communications is driving the increasing number of multimedia applications for PCs and allowing them to flourish," Hayes President Dennis C. Hayes said. "We've chosen to work with WTI because desktop videoconferencing will be a major contributor to the expansion of this part of the market and they are experienced in video compression and videoconferencing technologies. Our plan is to combine WTI's technology base with Hayes strengths in high-speed communications and distribution management to establish a strong presence in the videoconferencing market."

"The Hayes/WTI partnership will produce video communication solutions that are accessible to anyone with a telephone and desktop computer," said Chris Miner, President of WTI. "For the first time, users will be able to conduct real time video conferences that integrate video and audio capabilities on a standard telephone line."

Hayes will first deliver a personal, point-to-point videoconferencing product that operates over standard analog telephone lines, and will later support ISDN. Hayes Microcomputer Products, Inc., PO Box 105203, Atlanta, GA 30348; (404)840-9200 voice; (404)441-1213 fax; 800-USHAYES BBS.

THE STRANGE TALE OF DLX BBS SOFTWARE

Our fascination with the online genre does not revolve entirely around the interesting things you can do with a modem - however varied and useful. The story of Boardwatch is the tale of "watching" an industry in the throes of birth. The task of computer communications is as yet unfinished. We are hacking at dirt clods with sticks and regaling each other with heady tales of future farming. New hardware devices, new software tools for communications, and new paradigms of what communicating globally on a many-to-many basis really means provides an unfolding drama with winners, losers, fortunes made and lost, men with vision, and men with none. A single conversation between two people can alter the course of this industry forever, and the distance between the kitchen table entrepreneur who builds the multi-million-dollar corporation and the one who doesn't can often be measured in the space of a passing thought.

Richard Gillman works for Microsoft

ModemBase Pro

Puzzled about On-line Databases?

On-line Catalogs
Picture/Image Databases
Classified ad's Listings
Real Estate Listings
Text Search Databases
Knowledge Bases
Group/Event/RSVP Calendars
Order Entry/On-line Purchasing
Limitless information gathering

Wildcat-Major-Searchlight-PCBoard-TBBS-Others
No Programming Required
Basic PC Knowledge is all you need
Simple databases on-line in minutes
Full MultiUser & Network Ready
Completely Customizable
RIP - ANSI -VT-Most Terminals Supported
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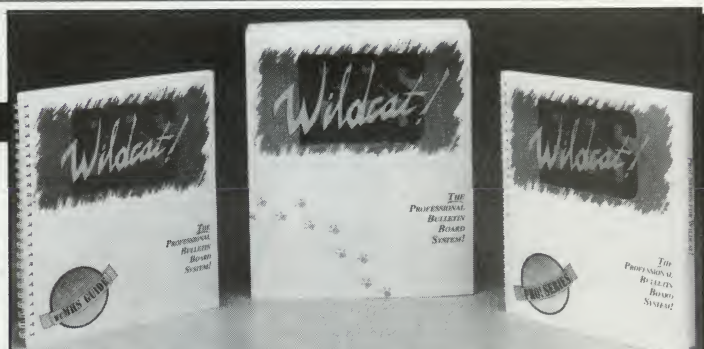
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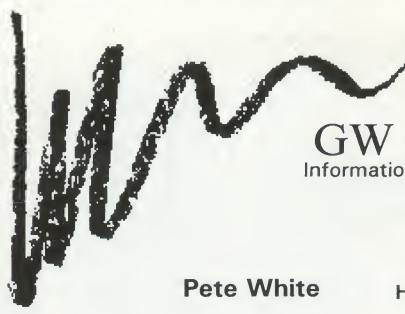
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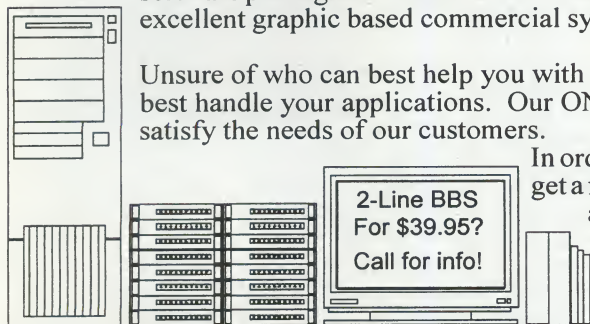
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Corporation and has for a number of years. This has made him a little goosey about appearing to be in the software business for obvious reasons. But he was fascinated with the BBS concept and he wrote a multiline BBS software package in Pascal he termed DLX. DLX allowed callers to talk to each other in real time by typing messages to the screen and was one of the early "chat" conferencing systems. It also featured a detailed questionnaire new callers were required to complete. As a result, anyone you might meet online also had a "profile" on the system you could examine.

The software gained quite a following on the West Coast and DLX systems seemed to spring from the sand. One operator in Portland was a quadraplegic that ran a dozen lines with a stick in his mouth. Many DLX operators became quite attached to the program. In recent years, it has suffered from a limitation of 32 lines per PC, and lack of such niceties as the Zmodem file transfer protocol. But a faithful following of DLX operators remains, with some operating multiple bulletin boards to get around the 32 line limit, and focusing on the chat/social aspects of the BBS where file transfer protocols are less significant.

The Online Store was an early experiment in selling computer hardware and software via a BBS. Gillman, who didn't really want a company and was nagged by the constant support questions surrounding DLX, made arrangements with the Online Store whereby they would sell the software and support it - remitting a percentage of sales to Gillman. Within months, Online Store declared bankruptcy for entirely unrelated reasons - leaving DLX up in the air.

Fred Gernand ran a popular chat system titled Baudtown using DLX. He offered to take over sales and support of DLX. Again within months, Gernand himself succumbed to a brain tumor. After his death, his wife Linda continued to sell and support the package and operate the Baudtown BBS - and does to the current time.

In a very surprising move on March 6 of this year, Gillman released the source code to DLX to the public domain. "I have decided to stop selling DLX, to abandon my copyright to it, and to make DLX a freeware, public domain program. There is no longer any charge whatsoever to use DLX. You may make as many copies as you like and you may redistribute them however you wish. I'd like to see Sysops add the DLX70BBS.ZIP file to their libraries, so

that it can become more widely distributed," said Gillman in a text file accompanying the release. "I am taking this action because I want to see social BBS's more widely used. Also, I would like to see them continue to evolve. I no longer have the time to do this work, and yet I don't want to see DLX die. Squeezing the last dime out of DLX as a commercial program is not that important to me." Gillman went on to encourage others to use the source code to develop their own products. "You are free to use this source code for any purpose. You may modify it and make your own BBS program, and even copy-right and sell your modified version."

The release, heralded widely as the death of DLX, may have actually given the program new life. Jeffrey Thompson operates two 32-line DLX bulletin boards in Seattle. **Chat!Chat!Chat!** was actually originally started by Shelly Gillman, Richard Gillman's wife. But Thompson bought it from her about 18 months ago and today claims 4200 callers are classified as active users and the system receives about 2000 calls daily at **(206)527-2428**. He also runs a second 32-line DLX system titled **28 Barbary Lane** at **(206)525-2828** that he's operated for about six years. Callers to these systems pay \$10 per month or \$99 per year for access, although much of the system is free to anyone.

By day, Thompson is a computer operator at Attachmate, a Bellevue company that produces PC-Mainframe terminal emulation products. But he's almost fanatically devoted to DLX and has set up a two-line product support BBS for DLX at **(206)525-0995** where you can download the BBS, the source code, and a number of enhancements and add-ons done by others.

Additionally, it would seem development may be ongoing. Two programmers, Jason Quinn and Lester Waters are already working on what they call Super-DLX. According to Thompson, Super-DLX will support more lines, at least 48 and perhaps 64 lines and will add support for the Zmodem file transfer protocol. They expect it to be ready by September and have characterized pricing as "moderate - around \$200."

Richard Gillman, Inner Loop Software, rag@hebron.connected.com

Jeffrey Thompson, DLX Support BBS, PO Box 25104, Seattle, WA 98125; **(206)527-1964** voice; **(206)524-2905** fax; **(206)525-0995** BBS.

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Fantasy Party line	713-596-7101
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N Y Information Exchange	718-353-1231
The Inner Circle	813-455-8449
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THE BUSINESS WEEK GUIDE TO

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ROBERT SCHWABACH

THE BUSINESS WEEK GUIDE TO GLOBAL INVESTMENTS USING ELECTRONIC TOOLS

This is a deceptive book. Most such titles usually lead to some drivel purported to make "computers easy for the rest of us" - though generally devoid of any useful information. *The Business Week Guide to Global Investments Using Electronic Tools*, by Robert Schwabach, is a startlingly good treatment of online investing. Schwabach is an experienced writer with more than 15 years with *The Philadelphia Enquirer* and The Chicago Tribune, a weekly syndicated computer column for the past 12 years, and he's the author of The Dow Jones Guide to Investment Software. It shows all the way through.

The book is designed for investors, obviously, and tackles three tough items in 449 pages. First, it gives a thoroughly knowledgeable overview of online services for investors, covering the vagaries, joys, and sins of CompuServe, Prodigy, America Online, Dow Jones News Retrieval, GEnie, Delphi, and even a few notable bulletin boards.

Second, in Around the World in 80 Markets, it actually covers mutual funds and some equities in Mexico, Latin America, China, the Philippines, Japan, Korea and dozens of other countries - an exotic tour quite beyond the usual U.S. NASDAQ beat.

Finally, the book includes and describes demo versions of three excellent software programs: Metastock SE, Windows on Wall Street Limited Edition, and Telescan

Analyzer. There is more than a little bit of a

technical analysis bent toward this investor view of the world.

We found a fascinating description of Pisces, a Chicago bulletin board at (312)281-6046. Pisces is home to one of the largest MetaStock user groups and provides tons of stock data in MetaStock format - zipped and downloadable at 28.8 kbps. *The Free Financial Network* in New York at (212)752-8660 also caught our eye. They give you 30,000 days worth of historical quotes for free (about a year's worth of historical data on 90 stocks or so.) Finally, AAIL, *The American Association of Individual Investors* in Chicago at (312)280-8565 actually maintains a list of about 60 financial bulletin boards.

The software with the book is a little disturbing. The programs look to be quite good and the book does an excellent job of describing how to use them, complete with some extensive screen captures of charts and graphs and how to generate them. But they represent a disturbing trend. At one time, several software programs came out with books. John Dvorak rather fathered the concept of fat books with disks. Initially, they found shareware titles and talked the authors into letting them include fully registered versions with the books.

Later, a number of publishers and authors gradually evolved this concept into the practice of including the "shareware" version that you could register. More recently, this has evolved into just including thoroughly crippled "demo" versions of programs. The problem is the software is prominently touted on the cover as being "included" and disclaimers that you don't really get the software are becoming more and more fine print in nature. At what point does it become fraud? In this book it probably does. They refer to them as "customized" versions worth hundreds of dollars and all yours with the book. They are badly crippled demos.

Still, we're charmed by Schwabach's turn of a phrase. This could easily be a useful but dry book. Instead, it is riddled with titles that don't really fit, but sure feel good - Thirty Things You Can Do With Common Chemicals Found in the Kitchen; The Brotherhood of Nations and Other Fantasies; Up With Ordinaries; Sub Sighted.Sank Same; and so on.

This book is thoroughly readable. We found a discussion of the difference between bonds and equities quite basic, but still just enchanting. And surprisingly, the tome really introduced us to some fascinating overseas investment knowledge we just wouldn't have found elsewhere. It describes at length some emerging technology funds that invest in telecommunications installations in third-world countries. Many of these countries are leapfrogging the entire wire-stringing century and installing quite advanced and largish cellular networks and satellite ground stations to get into communication with the world. And there are several funds that invest exclusively, and apparently somewhat profitably in this area. And the book even lists some 400 American Depository Receipts representing overseas stocks - but readily tradeable here in the U.S.

If you have an interest in overseas investment, technical analysis and investment stock software, or online investment services, you don't want to miss this book. And despite the essentially fraudulent software scam, the three programs included ARE pretty fascinating if you haven't seen them elsewhere. Published by Osborne/McGraw-Hill at \$39.95; ISBN 0-07-882055-3; 2600 Tenth Street, Berkeley, CA 94710; 800-227-0900 orders; (510)549-6600 voice; (510)549-6603 fax.

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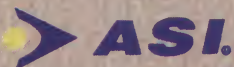
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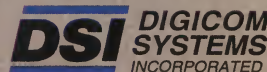
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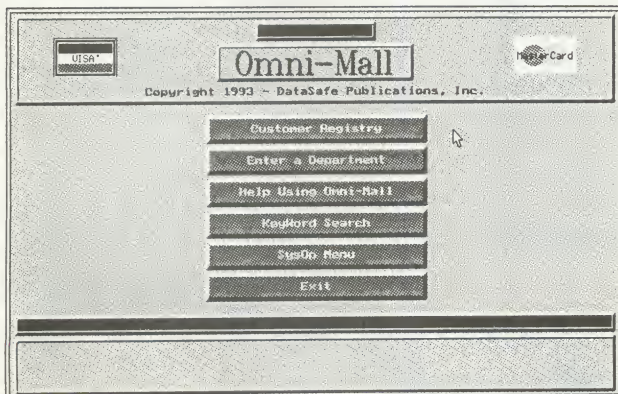
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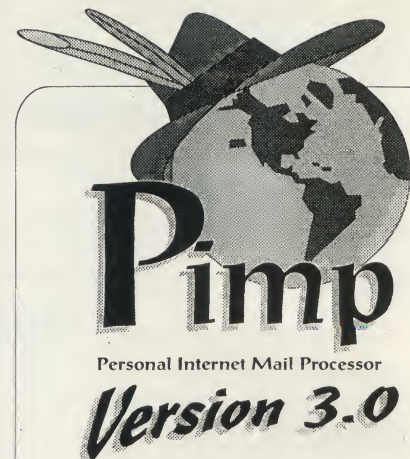


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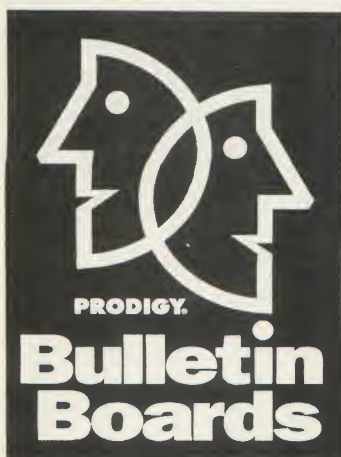


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PAGING ALL COMPUTERS

Jim Thompson
Western News Service

During the month of May, 1994, the BBS system that I manage (Marlboro Racing News — The Official IndyCar News Service) joined with NewsPager Corporation of America and Motorola for a unique experiment. The experiment combined BBS and computer technology with the latest in radio paging technology.

The resulting system allowed journalists covering the Indianapolis 500 to receive realtime read-outs of race cars as they ran on the track at the historic brickyard. They also received alerts of news items posted on Marlboro Racing News directly on their PCs. All of this was sent directly to their pagers and/or computers via radio waves.

The software for this unique system was designed by NewsPager Corporation of America. The hardware (a specially built alpha-numeric pager or an RNet receiver) was provided by Motorola. Not only does the pager contain more memory than normal, it can also be connected directly to a PC via a serial connector. The resulting system allowed those with the pagers or RNet units to be constantly in touch with happenings at the Indianapolis Motor Speedway and with the IndyCar series.

Before explaining the details, let me first give you a bit of background on why this system is noteworthy especially for the journalistic community.

The Marlboro Racing News BBS is concerned with the coverage of breaking news for news organizations. Covering such events is a complex process requiring a range of abilities and experience. A team of reporters is needed to monitor events and provide reports as quickly as possible. The information must be transmitted in the most efficient manner and in the most effective format. Finally, and in some cases this is the most important element of all, the end user must be aware that an update or new item is available.

Since our BBS is open only to working journalists, newspapers, magazines and news services, it is critical that they receive current news in a timely manner. News is a perishable commodity.

In years past, keeping up with world events meant regular trips to the teletype machine in the newsroom. The pace of news and of news reporters was tied to the constant beat and the irregular clacking and clicking of the teletype which held the world and all its events on an endless stream of paper.

No one realized, or for that matter cared, that the information was sometimes delayed as much as several hours or that it was available only to those in the newsroom. As long as the clacking continued, the impression was that nothing was being missed — that anything newsworthy was being monitored and all was right with the world.

The world has changed significantly since then. Nowadays, many news items would already be considered old by the time a teletype machine (working at the lightening speed of 60-baud) even printed them out. The old teletype would not even be able to handle the volume of news that is currently generated in a typical day. There would be much less news and, certainly, much less accuracy in reporting news, if the

only people with access to information were those in the newsroom.

Marlboro Racing News is dedicated to providing accurate information and statistics on the IndyCar race series to journalists as quickly as possible. Following a race, news organizations around the world rely on us to provide them with full reports, accurate statistics and photographs from the race site within minutes of the event.

But covering races is only part of the service we provide. For many organizations, it is the information we provide at times when there is not a race that is



Motorola Inflo NewsPager

often the most critical. It is this area of coverage that resulted in our unique agreement with NewsPager Corporation of America.

In cooperation with Motorola, the Indianapolis Motor Speedway and the United States Auto Club (USAC), NewsPager Corporation of America setup a system whereby journalists could receive instant reports and news along with timing and scoring information via a radio-controlled pager system.

This was a cooperative effort between all of the agencies. Motorola provided pocket-sized "Inflo" pagers which were specially designed for this task. The pagers have more memory than normal (128K) and, as NewsPager says, "The Inflo by Motorola is unique in its capability of keeping up with the torrid pace of information at the brickyard." USAC provided the link between the pager system and the track telemetry system. Marlboro Racing News provided news from the IndyCar series.

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Graphical user interfaces have been available on many different computer systems for years. But until now, you haven't been able to get a bulletin board system with a GUI unless you used a proprietary solution. Until now. RIPscrip (Remote Imaging Protocol script language) is a published specification developed by TeleGrafix supported by over twenty-five leading vendors on the PC, Macintosh, and Unix platforms. Any on-line system that can display a text menu can use RIPscrip. Chances are that your favorite BBS has RIPscrip support built in.

RIPdraw™

RIPdraw is the entry level RIPscrip graphics creation package. Designed for recreational system operators and the telecommunicator, RIPdraw is perfect for creation of stunning on-line graphics at a low price - \$49. • **Special - \$35** •

RIPaint™

RIPaint is a graphical drawing environment designed for creating menus and screens to supplement or replace a host's existing menus. Integrated tools for creation of clickable buttons, creation and use of bitmap icons, and optimization of files makes this a powerful tool for creating a graphical user interface for your system at an affordable price - \$200.

RIPscrip Graphics are supported by these bulletin board systems:

The Major BBS (Galacticomm)
NovaLink Professional (ResNova)
Osiris XLT (Int'l TeleCom)

PCBoard (Clark Development)
Remote Access (Wantree)
Searchlight (Searchlight Software)

Synchronet (Digital Dynamics)
TBBS/TDBS (eSoft)
Wildcat! (Mustang Software)



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The pager units were given to journalists at no charge. Others were charged a modest fee. All profits from this test system run during the month of May were donated to charity.

NewsPager provided a range of services on the pagers during the duration of the test. Among those services was Marlboro Racing News. As stories were posted on our BBS, they were also sent to NewsPager for distribution over radio waves via the pagers. This solved a key problem — how to notify journalists that new items have been posted.

In the past, it was not unusual for a reporter to call into Marlboro Racing News at, say, 1:00pm only to find that no new items were available. We might actually update the news at 1:05pm. But the person who called five minutes earlier had no way of knowing about this update. The result is that they might not call again for another day or even another week.

NewsPager Corporation of America devised a unique software program that addresses this problem. The Motorola pager unit itself has a cradle that allows it to be connected via a serial port to a PC. Programmers at NewsPager wrote a C+ language program that runs under Microsoft Windows called News@10. As data is received over the pager network, it automatically updates the News@10 program. A simple-to-use-and-understand interface allows the user to select and display news as it is received or to review past items. Alarms can be set to instantly inform the user if a particular item is received or updated.

In addition to Marlboro Racing News, the NewsPager system provides a range of services on their pager units and via News@10. These services include real-time readouts of cars as they run on the track at Indianapolis, qualifying and race reports, team lineups and driver profiles. They also provide scores and results from major league baseball, NHL Hockey, NBA Basketball, UPI Sports and UPI News headlines.

We sent news headlines and summaries of the items posted on our BBS. Journalists were alerted to important news developments, press conferences or interview opportunities. If the items were of interest, they could call into Marlboro Racing News for full details. The News@10 software requires Microsoft Windows 3.1, 4-megabytes of RAM, at least 3-megabytes of hard disk space and an open serial port. You also need a Motorola Inflo NewsPager or a Motorola RNet Data Receiver. The



Motorola RNet Data Receiver with lap top

RNet is similar to the pager in that it can receive the same data but does not have a built-in viewing screen or on-board memory. It functions only in connection with the News@10 program.

Those using the Motorola Pager units who were at the Indianapolis Motor Speedway during the month of May received times and speeds of the cars as they ran around the track.

Here is how it works: A total of 11 sensors buried under the Indianapolis Motor Speedway track report the position and time reference of each car. This data is sent to USAC's data center where it is interpreted and categorized. The interpreted data is sent via a dedicated line to a NewsPager computer running OS/2. Their system looks for any changes in the data then sends the changes using a patented technology known as "mask-fill." The data (whether from the track or from any other source, such as UPI or Marlboro Racing News) is then sent to three main paging channels in the NewsPager system: ComTech Paging (an area-wide system), EMBARC (a nationwide system) and Paging USA (a trackside system). The information is broadcast on each of the paging channels and received instantly by the NewsPager units.

All of this data transfer is happening in seconds as the cars travel around the track at speeds in excess of 200 miles-per-hour! It takes less than 8 seconds from the time a sensor picks up telemetry from a car to the time the read-out (time, speed, car and driver) appears on the pager.

For the future, we hope to expand our association with NewsPager Corporation of America, Motorola and IndyCar. The plans include coverage of all 16-

races in the IndyCar series beginning in 1995. We are also experimenting with the possibility of sending photos over the paging network through the use of fractal compression.

Journalists on the system would be able to receive the fractal images on their PC along with the latest news headlines and summaries without ever making a call. Best of all, they would never have to worry about missing anything.

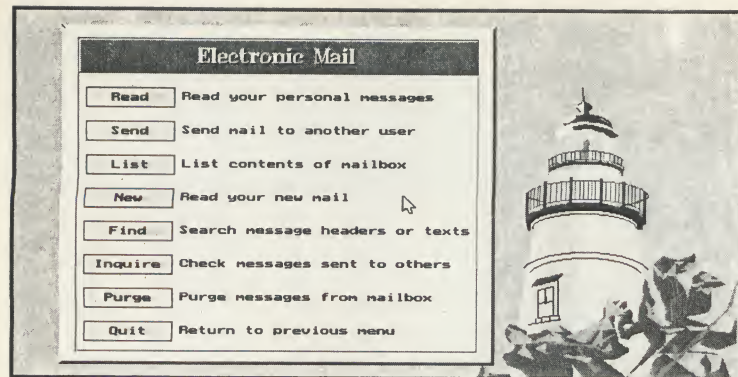
The addition of the pager technology does not mean that our BBS is suddenly obsolete. It actually increases the usefulness of Marlboro Racing News.

Although the Inflo can be called a "Super Pager" because of its increased data capacity, there is a limit to the amount of data that can practically be sent via the pager system.

Journalists will still need to call our system to receive the full text of news items. Also, although the fractal images look great on the screen, they are not anywhere near the quality needed for publication. A newspaper will still have to call our system to download the full-resolution versions of the photos.

This is a perfect example of the benefits that can be gained by combining technologies. As a Sysop, you must always keep your eyes open to new possibilities. The information highway is still under construction and we are the architects.

(Jim Thompson is Managing Editor of Western News Service in Los Angeles, California. He also manages the Marlboro Racing News BBS. CompuServe: 72777,2677, MCI Mail: 321-4127, INTERNET: jim.thompson@wnsnews.com)



Turn any RIP screen into a custom menu...
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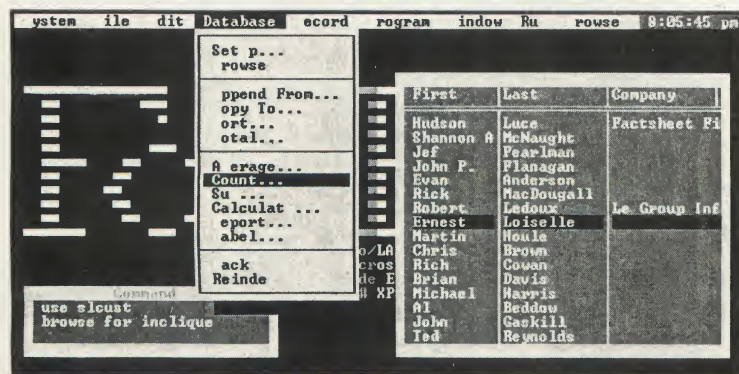
RIP support—not RIP service

Some choose Windows; others pick OS/2. But everyone loves the dazzling displays, intuitive menus and mouse support that a graphical user interface provides. They don't like giving those features up whenever they call a BBS.

That's why more and more callers use the Remote Imaging Protocol by TeleGrafix—and every BBS program says they support RIP. But all RIP support isn't created equal. Ask these questions to see how your BBS compares to *Searchlight 4.0*:

"Searchlight has incorporated RIP technology to an amazingly integrated level with their BBS ...It looks hot."

Jack Rickard
Boardwatch Magazine



Searchlight 4.0's direct video support lets you run any text-based DOS program as a door

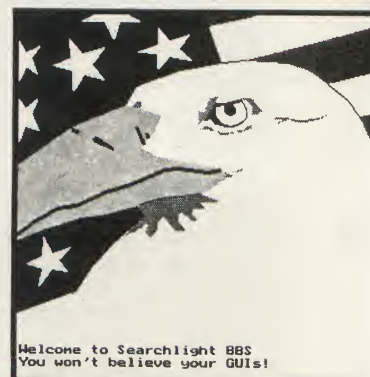
Searchlight

...you won't

Menus
"on the fly"

Local

Searchlight 4.0 lets sysops
see RIP graphics...



Can you use your mouse to move up and down a list line by line? Or are you just clicking on buttons that say [C]ontinue, [N]onstop, [S]top?

Can you tag items by clicking on them with the mouse? Or are you still typing line numbers or pressing keys?

Can you confirm a choice by clicking with the mouse? Or do you still have to press *Enter*?

Can you generate RIP menus on the fly—so you can create custom menus in seconds? Or are you stuck with default menus—unless you buy a paint program and spend hours drawing screens?

Can you see RIP? Do you see the same screens callers do, so you can test screens and features locally? Or do you just see streams of meaningless codes unless you call from another computer?

Nobody offers better RIP support than Searchlight Software, Inc. We released the first RIP-compatible BBS in March, 1993. We introduced the first BBS with internal RIP support—featuring pick lists, graphical menus and dialog boxes—last August.

Searchlight 4.0 is the first BBS program with local RIP support. It's the *only* BBS program with a fully graphical user interface.

And on August 17, 1994, we'll release the first BBS program that supports RIP 2.0—so your callers can see JPEG images and hear digitized sound online.

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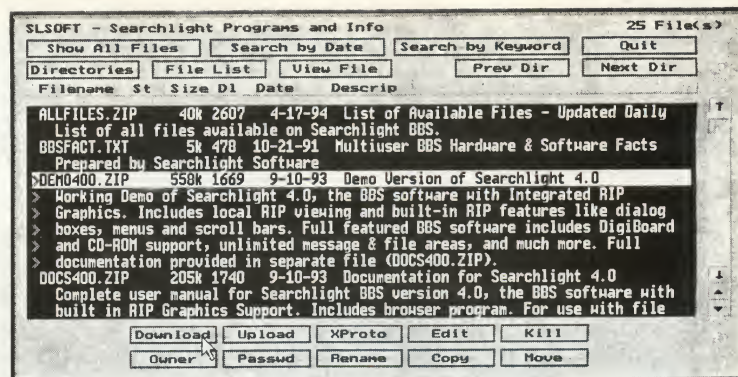
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:ZB06NB6UBK5UBK690K:FB55Z00
:ZC15RBY50B282CT7T0K:LC15QC165
:LC17FC17T:ZC56SCA66C87DC17C0K:FC6900
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:LE64RE15D:LE75DH41:LDZ4ZEF56
:LDX57E04V:LE95IEC51:1e01:V000000100
:00279Welcome to Searchlight BBS
:0027JYou won't believe your GUIs!
:~::~~

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RIP

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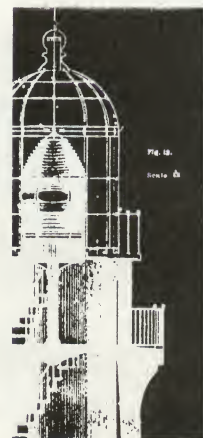
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PEOPLE ONLINE

CYBER STALKER AND THE POKER CLUB



by Phyllis Phlegar

The recent publicity about online stalkers got me thinking about a friend of mine whom I met about a year ago on Delphi. I'd already surfed a few other online services and wanted to see what Delphi was like. It seemed like a good place to do a lot of live chatting and perhaps I'd meet someone interesting. First week out, I did; a writer named Ted Remington. Remington and I had a lot to talk about; we'd both met the love of our life online, liked the same parts of country, and had similar occupations. In addition to his regular job as a technical writer, he was writing a novel about a serial killer who takes his obsession online. I wanted to read it, and even though Remington had only gotten the first few chapters done, he uploaded them to me. It was hard to stop reading, but I had to, the novel wasn't finished yet.

Over the past year, I kept up with Remington through e-mail, and a few weeks ago he sent me the finished novel (on disk) that he says is a cross between a horror story and a techno-thriller.

Remington got the idea for his book after an online friend confided in him that she was having trouble with someone who started out as being a

fairly nice guy, but suddenly became obsessed with her. He said, at one point, that he was going to find her, kill her husband and take her away as his "love slave." Ted's imagination went wild. Not much later, "Poker-Club" began to take shape. The main character is a control freak named Leonard. Leonard's parents died in a plane crash, and left him enough money to live on for the rest of his life. Planning murders was how Leonard entertained himself, and found cyberspace to be full of waiting victims. With a handful of fake IDs and essentially untraceable money orders and bank checks, Leonard could go online pretending to be anyone he wanted to. Usually his online bio said he was an attractive man who was unhappily married, which automatically made him a somewhat sympathetic, unthreatening figure. He'd get involved with a woman, find out all he could about her situation, and have computer sex with her, as a winnowing tool. The perfect victim was single, not dating anyone in particular, and willing to talk about themselves; where they lived, what they did for a living, and of course, would get quite attached to him. When the time came for Leonard and his unwitting victim to meet, he was anything but the handsome, sexy, sensitive everything-they-could-ever-want man they'd been involved with online. What they'd see was a little, unremarkable man, who had a painful death planned for them, a murder which would leave no clues and possibly keep the local police baffled forever. Sounds like very scary stuff. Remington's point in writing the book (which he says even gives HIM nightmares) was to say "User beware! There are people out there who will hurt you if they get the chance." I am

about halfway through Remington's book, and I am hoping that the police will finally find Leonard...but I also am afraid they won't. As I read more and more, it's hard to miss the point that the anonymity of the cyber world is very fragile, and that you can be a victim of the "Leonards" out there. Remington is convinced that people (adults AND children) have already been assaulted, raped and killed as a

result of a contact that they made online. The most vulnerable are the single women, who are looking for a relationship. For them, Remington suggests a "shielded" post office box, for starters. He also says watch out for "little" questions that can help a stalker locate you geographically, like "do you go to many baseball games" (figuring out your general location) and then, "does it take long to get there" and so on.

The most obvious question I had for Remington was, how to spot the "Leonards." Unfortunately, it's not very easy. But there are a few things to look out for, like one-way communications. Be wary of someone who can't ever be reached on the phone (but calls you) and asks "little searching questions" about your location ("did you say you were near...") and your personal life ("oh, your boyfriend broke up with you recently...") Overall, Remington says to give yourself enough time to get to know someone, because no one can put on an act indefinitely and something is bound to slip.



Remington is looking for a publisher for "Poker Club," and keeps getting the catch-22 line that you can't get a book published without having...a book published. But he believes (and I agree) that this is a good book whose time has come. Remington is already working on another book, called Sitters Club. It's about a local bbs where women exchange babysitting. But one

of the mothers is really a sicko who is searching for victims to be in child pornography, and "snuff" films. Remington's bio on Delphi mentions Sitters Club and says "Don't ask, it is just TOO gruesome." After recently spending close to three hours chatting with Remington, I had the feeling that there was no where to hide! I asked him, what did he do to protect himself? He says it's too late for him, and he doesn't worry about it; after all, one needs to weigh the risks against the gains. "I could not live like Salman-Rushdie." (If you'd like to get in touch with Remington, he's TREMINGTON on Delphi, TREMINGTON@delphi.com on the Internet, and he's borrowed a friend's p.o. box, should you want to reach him by regular mail, at Ted Remington, P.O. Box 473277, Aurora, CO, 80047.)

[Phyllis Phlegar is a graduate of the University of North Carolina at Chapel Hill, and also holds a private pilot's license. In 1974, she was the first female news anchor for the North Carolina News Network, and most recently worked as a weather anchor on Business Radio Network. She's currently a freelance announcer and her work can still be heard on BRN, National Public Radio and the Armed Forces Radio Network. Phyllis is currently working on several writing projects, including those for Boardwatch Magazine, and Addison Wesley Publishing Company.]

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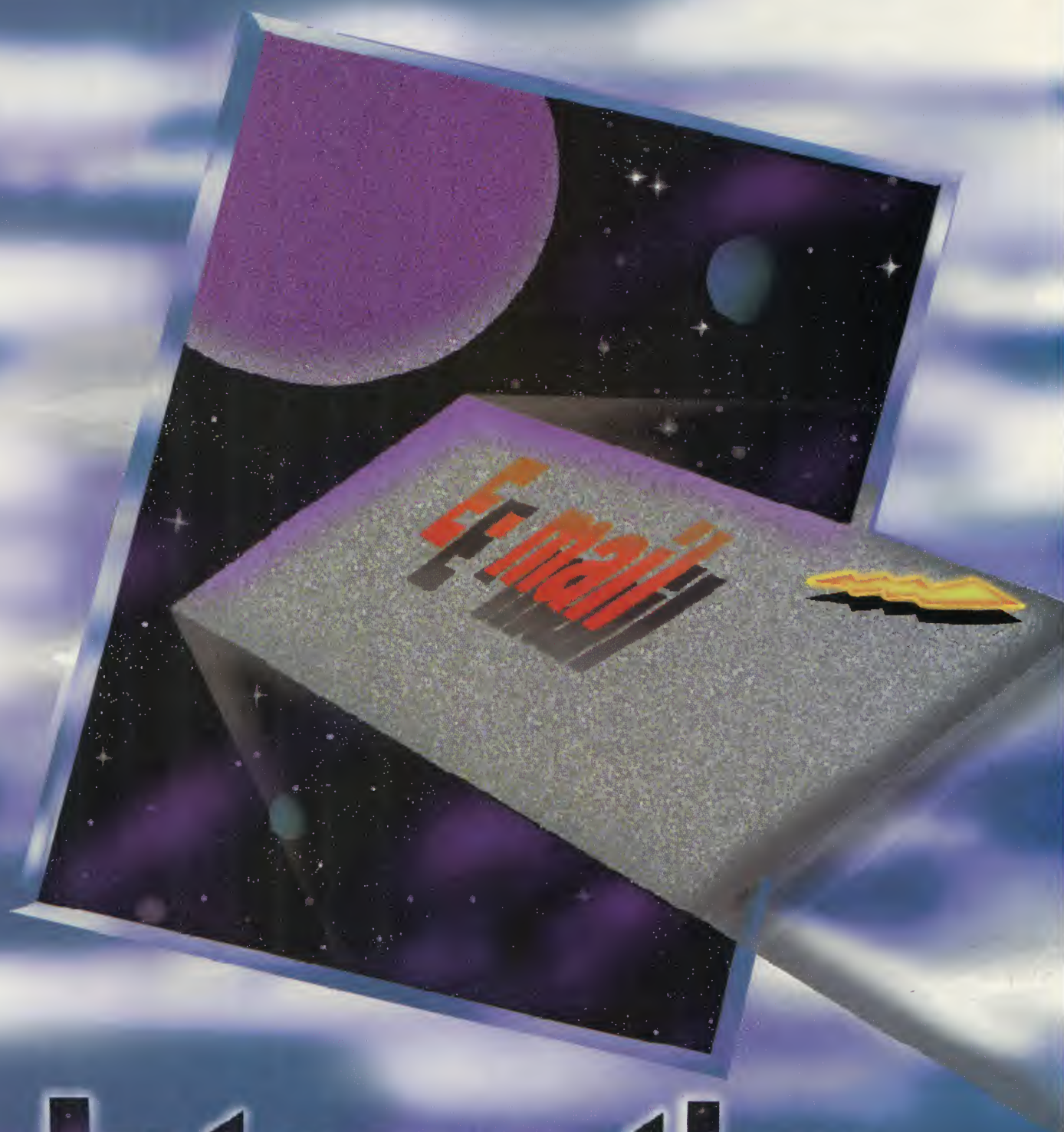
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Internetica

CHEAP INTERNET MAIL FROM WINDOWS

by Jack Rickard

Since our first story on the Internet in 1989, we've received quite a bit of reader comment on why we bothered. This year, it is a bit more apparent. But the truth is, of the 15-17 million playing hard online, probably a scant million or so have ever made the TCP/IP connection. Far more pervasive has been the impact on electronic mail. The Internet, or perhaps more accurately the development of domain name service addressing in late 1988, has allowed the development of a common e-mail backplane for online services. By the end of last year, essentially all online services of any size had connected to the "Internet" for the transfer and delivery of electronic mail. This eliminated the conundrum of "e-mail islands" so long the status quo in the online community. Now you can send e-mail to virtually any service from any service - anywhere in the world. While it almost seems an obvious necessity now, it didn't come easily.

Electronic bulletin boards have been making the connection for several years, but at this point it is reaching a frenzy and by the end of this year, virtually all subscription bulletin boards will be passing electronic mail and newsgroups to and from the Internet. Many will endure the expense and technical trauma of connecting to the Internet itself via TCP/IP to offer their callers telnet, ftp, gopher, world wide web, and other interactive services. And an increasing number are also providing Internet services such as SLIP accounts and UUCP mail connections themselves.

The overall effect is a "connectivity rush." The first time you see Mosaic spinning it's globe and coughing GIF images, allowing you to click your way from Zagrebe to Zurich, it is nearly overpowering. But after playing with the toys, the person-to-person electronic mail remains the nut around which all else revolves. The "public" forums provided by USENET newsgroups are technologically related and also provide an important aspect of the real usefulness of online technology.

But ultimately mail wants to be on the desktop - not on the online service. The connection costs, Internet or otherwise, cause us to constantly revisit this scene. The development of FidoNet point systems and QWK offline mail readers revolve around the fact that leaning on your elbows staring into the monitor to browse the latest postings in *rec.humor* doesn't make much sense at \$6 per hour long distance costs if you could just as easily download the mail, DISCONNECT from the service, and browse it at your convenience offline.

Another relatively recent factor is Microsoft Windows. While this doesn't sound recent, it actually is. It is true that Microsoft did first announce Windows back in 1985, and it is also true that they've probably sold 50 million copies of it in the past two or three years. Unfortunately, the software development community is just NOW learning how to develop software that 1. works and 2. makes sense. A tremendous amount of Windows software was just plain broken and that that did work too often made such a mess of the "intuitive gui interface" that no matter how hard or how fast you clicked that little mouse, it was extremely unlikely that you would ever get anything done, or even find the part of the program you were looking for with the vain hope that if you could find it, it would do what you wanted.

In the past six months, we're seeing a flurry of products that more or less work, are installable, and do seem to make sense with regards to the interface. And this offers some particularly rich opportunities when dealing with electronic mail and newsgroups.

The problem is that most of the sizzle today is in TCP/IP mail programs. And for the majority of individual callers, TCP/IP just isn't happening any time soon. Fortunately, there is an alternative. Many of the smaller bulletin boards make the mail connection to an Internet host using a relatively inexpensive UUCP account. These dialup accounts can be had for as little as \$15-\$20 per month from traditional Internet service providers such as Holonet and Netcom. UUCP stands for the Unix to Unix Copy Program and traditionally it uses the UUCP g file transfer protocol. As protocols go, it is pretty lame - windowed up to 7 packets

with packet sizes that can theoretically be up to 4096 bytes - but are usually limited on most hosts to 64 bytes. It predates XMODEM. But it is one way to do an automated dialup connection for electronic mail and newsgroups on an intermittent basis.

Even better, the BBS software used by many bulletin boards can now itself allow service of UUCP. and as bulletin boards themselves begin to offer these UUCP mail accounts, the cost of such connections will drop into a very affordable range.



Icon group for WinNET Mail

So assuming that UUCP connections will be very available and very inexpensive, and further assuming that we would all rather do mail from our desktop at our leisure using a usable Windows interface, we took a look around for a Windows UUCP mail program packaged such that an ordinary humanoid could install it. We intentionally pretended that the bevy of Windows interfaces for an underlying Waffle installation did not exist. Installation of this combination seems to be more of a career move than a weekend project.



Icon group for MKS INTERNET ANYWHERE

And we were surprised to find relatively little available. We did find two that were just broken enough that we normally would pass on even mentioning them, and just fascinating enough that we had to anyway. **WinMail** is a shareware program (\$99) and **MKS Internet Anywhere** is commercial software at \$149. Both have some serious underlying technical flaws, that can probably be fixed even-

tually. But the good news is that both have absolutely mastered the Windows interface far beyond anything we expected. As to interacting with these programs on the desktop, they are both a joy to install, and to use for reading and responding to electronic mail and USENET news. You will NEVER go back to TIN, RN, NN, or any other UNIX newsreader we've seen.

WINMAIL 2.11

WinNetMail, more formally WinNET Mail and News, was developed by Computer Witchcraft, Inc. as a front end for their Internet service. In fact, the early versions of this program ONLY worked with their online service. But in more recent releases, including version 2.11 we looked at, they do support an "alternate" service provider mode.

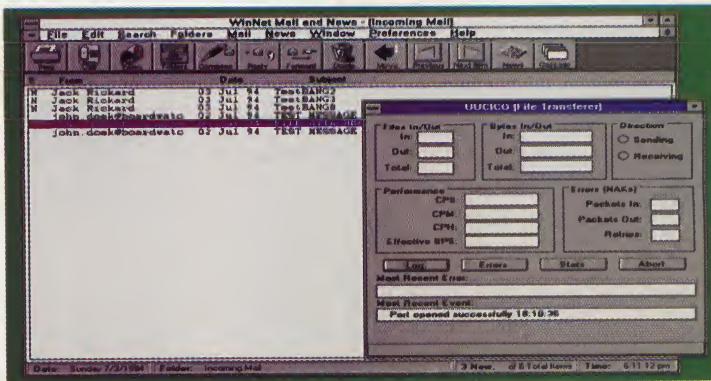
The program is available by ftp from oak.oakland.edu in the /pub/msdos/windows3 directory in the file winmai211.zip. It is slightly over 686 KB in size zipped. To install it, you simply unzip it into a directory. Then, from Windows, click on the **SETUP.EXE** and it makes itself into a program group into Windows.

There are some installation questions that may give the absolute novice pause. But we found them few in number and relatively simple. Most likely to cause confusion are your **LOCAL MACHINE NAME**, the **REMOTE MACHINE NAME**, and the **DOMAIN NAME**.

UUCP was originally based on bang-path addressing that was simply a list of intermediary machines separated by the ! symbol, referred to as a bang. All UNIX machines have a name - typically 8 characters or less. You must find out from whoever you get a UUCP connection from what the **REMOTE MACHINE NAME** is. This is the machine you dial into to pickup mail. You also must agree with your host what your own machine name is and enter that as the **LOCAL MACHINE NAME**. Domain names can cause some confusion, and this program eliminates none of it. Typically it is something like @BOARDWATCH.COM. But in this case, they want the domain name of the HOST computer - without the @ symbol. In this way, if your local machine was **REDSTAR** and you got your UUCP connection from the Boardwatch BBS, you would be @REDSTAR.BOARDWATCH.COM. But in the

DOMAIN NAME field you would enter BOARDWATCH.COM.

The other little installation nightmare on a UUCP system is the "chat script." Almost all of the elements of the session protocol are quite automatic and built into the UUCP g session protocol itself. But you do have to write a little script to logon to the service, do the login name/password dance, and get TO the UUCP g protocol function. From there, the two programs can take over and do the entire mail session. In UNIX, these system scripts can be quite cryptic. Both these programs do an excellent job of simplifying this. In WinMail, there is a file titled **CHAT.RC**. This is a simple series of SEND and EXPECT sequences that you enter to connect to your host. It doesn't include any modem param-



ters or even the phone number of your host (which you do have to provide elsewhere). The script looks like this:

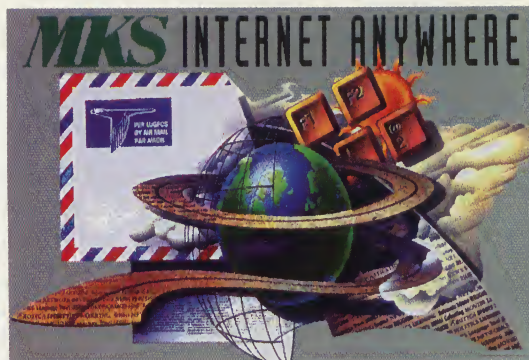
```
ogin:
redstar
```

```
sword:
bombay
```

```
terminal:
uucp
```

This script would dial the service and wait for the prompt "login:" It would respond by entering "redstar." It then waits for the "Password:" prompt. And similarly enters "bombay." And at the "terminal:" prompt enters "uucp." From that point on, the protocol takes over and holds a mail session.

The interface to this program is a work of art - very easy to use and quite powerful. The program allows you to dial your host at will by clicking on an icon, or to schedule regular mail calls to



happen in the background. This was very easy to use.

Mail is treated somewhat differently from USENET news groups. It uses a folders analogy fairly common now to allow you to file inbound, outbound, and otherwise bound mail. It has a search function that is quite powerful and you can search in any particular folder, in

any particular message, or across all folders for whatever keywords you are looking for. Very intuitive icons allow you to go to the next message, the previous message, another folder, reply to a message, etc.

The program generally hides most of the Internet message header detritus. It allows you to send carbon copies and you can attach binary files very easily. It automatically UUENCODES binary files and attaches them to outbound messages in a pretty standard format. Similarly, if you receive an e-mail message with an attached file in UUENCODED format, you can select DETACH BINARY FILE and it will prompt you for a directory and file name. It then does the UUDECODE and creates the file in that directory. Very easy to use.

The Newsgroup function is similarly powerful with extensive search capabilities. You can enter a search word and it will compile a list of messages with hits. Simply click on each message to read them, and the next/previous icons to cycle. You can also respond to the message poster privately, respond to the newsgroup itself, or post a new message to a newsgroup quite easily. Call up a list of newsgroups and select the one you want, and you will display a list of

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Search and Retrieve	\$149.00	Galactibox (16 slot modem chassis)	\$1279.00
Dial-Out	\$149.00	OST PC XNet Card	\$1089.00

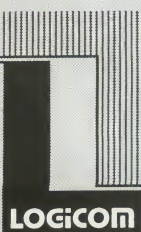
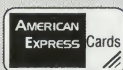
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The program does have some drawbacks. First, it is badly crippled. In the distributed shareware version, you can only subscribe to 3 newsgroups and connection speeds are limited to 2400 bps. These are both capacity/performance issues so until you register you still won't know. And at \$99 it is a non-trivial expense. Our normal reaction to this is simply to throw the thing in the trash or send it to RAM heaven. There are always a few individuals who do want to take advantage of the free distribution mechanism of shareware, but only on their own terms. Over time, we've observed that they virtually never succeed - more crippled by their own tiny spirits than their software itself actually is.

The software is free of charge if you use their service. The service is **\$8.00** per hour with a monthly minimum charge of **\$9.95**. This does NOT include long distance fees. They do provide an **800** number at an **ADDITIONAL \$7.20** hourly non-prime and **\$10.80** per hour prime time. It's good work if you can get it.

But the big problem with WinMail is technical. The UUCP g protocol implementation is just very poorly done. The initial INITA/B/C handshake is almost comical - perhaps even designed to work mainly with their own online service and poorly with others. Received packets are limited to 64 bytes - traditional on 20-year-old UNIX implementations where today's focus is on TCP/IP, but inexcusable in a newly developed Windows product. And on encountering errors, this program comes completely unraveled. You will need crystal clear lines to do much with WinMail and then connections are liable to be a bit unreliable.

There is also a CPU usage selection in the setup program. Pick LOW. This is how much of the CPU you want the dialer to use. On a Gateway P5-90 Pentium machine, Windows simply stops dead in its tracks on any of the higher settings. I don't know what this program is doing in there, but it sure is busy.

Despite our disappointment in the actual communications ability of this

program, and the underlying financial desperation of Computer Witchcraft, the Windows interface to e-mail and newsgroups is really quite well done. With a bit of work on the UUCICO dialer, this one could be a winner. Computer Witchcraft, Inc., PO Box 4189, Louisville, KY 40204; (502)589-6800 voice; (502)589-7300 fax; Internet: help@win.net.

Mortice Kern Systems, Inc. of Ontario seem to be primarily focused on bringing UNIX tools and utilities to the DOS platform. For what reason, we simply can't fathom. But they have released a commercial software program titled MKS Internet Anywhere at \$149 that is very similar in function to WinMail, in a pretty nice package with documentation and a slick install program.

MKS Internet Anywhere is an e-mail and newsgroup reader for Windows. Broadly speaking, the Windows interface to newsgroups and e-mail is again just superb, and not notably different from WinMail's. Newsgroups and E-Mail are actually in separate icons rather than under the same one, but feature for feature they look and feel very similar - and very good. You CAN have up to four DIFFERENT users with different identities on the same machine. Perhaps useful.

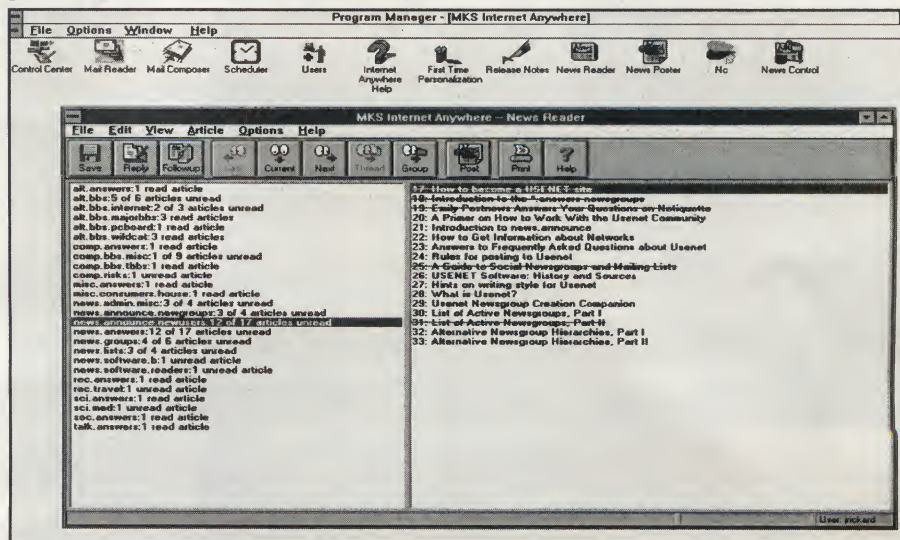
MKS has a slightly more adroit installation program. We found a couple of items to like about it. First, it actually runs a search on your hardware, finds all serial ports, then finds all serial ports with modems, then detects what

speed they will support. It looked nice, locked up once doing this trick, but generally worked. It's an interesting step toward making a comm program easier to install.

The system also supports multiple host sites, each represented by an individual icon. Where WinMail's UUCP g protocol support was poor, MKS has a superb implementation allowing multiple window sizes, multiple block sizes, and an excellent debugging window to allow you to view precisely what is going on to whatever detail (0 to 9) you like. You can log this debug window to a file, and you can enter a debug level for the host. UUCP actually has provisions for allowing the calling system to set a debug level for the host. In this way, if you can get the debug log from the host and compare it to your local one, you can learn more than you ever wanted to know about UUCP g. Best, in actual performance, this UUCP g was rock solid with good transfer rates.

The scripts were even easier to set up than in WinMail. A screen displays sent strings on the left and expected strings on the right and you fill it out on the panel. We had our first connection with this package in about 5 minutes.

The documentation consists of three books: Getting Started, User Guide, and Access Providers. They clearly were an attempt to make Internet simple for everyone. Unfortunately, it isn't all that simple, and the net result was that with the exception of Access Providers, they simply weren't very informative. There was very little technical information about the file formats or anything else. They were



pretty, and readable, but not terribly useful.

The **Access Providers** book WAS interesting. In fact, it's a feature. The book contains 136 pages of very detailed contact and product information for Internet UUCP account providers by country and state with excellent coverage of Canada and 30 other countries. For example, you can get UUCP accounts in the Ukraine at \$5 per month plus 10 cents per kilobyte for International mail and a penny per kb for local mail from the Crimea Communication Centre (snail.crimea.ua). This is the BEST collection of UUCP host providers we've ever seen and a real service to those buying the package and looking for inexpensive connections. There are even 12 pages of discount coupons in the back from various providers around the world.

The bad news is almost heartbreaking. Where WinMail handled domain name addressing splendidly, MKS inexplicably doesn't handle them at all. The documentation talks about DNS quite a bit, and you can enter an address easily enough. But it transmits it in an ancient bang path format long overshadowed by domain name addresses. In the default, even the FROM: address in message headers is also a very local bang path that will be meaningless to any mail package on the other end that tries to reply based on the message header. Fortunately, you can configure your local site for a domain name in the "Control Center" to repair this oddity. And all mail received from the host must have the rmail statement in bang-path format as well. Some hosts can do that, and most don't bother anymore. Domain name service was rolled out in 1988 guys. This is 1994. Do a quick calendar check up in Ontario and if it's the same year up there, haul out the old FORTRAN WATV compiler and have another go at this little faux pas.

The lack of DNS support in this package severely hampers its utility. You may be able to work this out with your UUCP provider, or find one that hasn't changed their system in the past six years, but the nature of the problem is such that you can barely describe it on the telephone if you KNOW what it is, and as mentioned, the documentation does little for you there. We found their BBS uninhabited - about a dozen callers in the past week talking about YACC and LEX and so forth. The package does provide 30 days free product support.

In a perfect world, we'd love to take parts of WinMail and combine them with parts of MKS and do mail from the Windows desktop. We can't, and both of these packages need a bit of work before they will be useful tools for those who don't actually have a crying need for a \$1500 per month TCP/IP line, but would like to do a few newsgroups and e-mail from the comfort of their own desktop. But the Windows interface was so splendidly appealing, we're hoping they signal things to come from future packages offering powerful mail capabilities for the Windows platform - without the need for an expensive TCP/IP connection. Mortice Kern Systems, Inc., 35 King Street North, Waterloo, Ontario Canada N2J 2W9; (519)884-2551 voice; (519)884-8861 fax; (519)884-2861 BBS; Internet: inquiry@mks.com

O'REILLY'S GLOBAL NETWORK NAVIGATOR NAMES TWELVE BEST DESTINATIONS ON THE INTERNET

O'Reilly & Associates, Inc., has made a name by publishing very niche books on very technical subjects dear to the UNIX community, and they're widely regarded as the best of their genre. More recently they have ventured into slightly more popular titles and scored big with Ed Krol's *Whole Internet User's Guide and Catalog*. They have put up a World Wide Web site they call the Global Network Navigator at <http://gnn.com>. It provides links to some 650 selected Internet sites and has become a popular index to the Internet - they claim some 150,000 accesses per week at the site.

In June, GNN recognized twelve of the "best destinations on the Internet" with an Editor's choice award. This represents a veritable busy kit of "what to do with your Mosaic."

ARTSERVE

<http://rubens.anu.edu.au>

Artserve is an arts history database consisting of 2,800 images of prints largely from the 15th century to the end of the 19th century. It was developed by Professor Michael Greenhalgh at Australian National University.

THE CURRENCY CONVERTER

<http://www.ora.com/cgi-bin/ora/currency>

The currency converter, developed by David Koblas, automatically converts

currency from one denomination to another. It is an excellent example of how information can be presented interactively.

EDUPAGE NEWSLETTER

<http://www.ee.surrey.ac.uk/edupage/edupage/>
The Edupage newsletter is published three times a week via email, gopher and the World Wide Web. It summarizes printed news coverage of interest to leaders and citizens of the Internet.

THE PALEONTOLOGY SERVER

<http://ucmp1.berkeley.edu/welcome.html>

The University of California Museum of Paleontology server is an interactive natural history museum that is well organized and makes use of large graphics. You can learn about phylogeny, the "Tree of Life", or examine photographs of Great White Sharks off the California coast.

INTERNATIONAL TELETIMES

http://www.wimsey.com/teletimes.root/teltimes_home_page.html

According to its writer's guidelines, this general interest magazine "seeks to present information opinion and observation drawn from the experience of living in a particular place." Editor-in-Chief Ian Wojtowicz is sixteen years old.

INTERNET UNDERGROUND MUSIC ARCHIVE

<http://sunsite.unc.edu/ianc/>

Developed by UC Santa Cruz students Robert Lord and Jeff Patterson, the Internet Underground Music Archive intends to apply the principles of free software to music distribution. Going beyond the limits of what's defined as commercially viable, the Archive seeks to promote obscure and unavailable bands.

SCIENCE FICTION RESOURCE GUIDE

<ftp://gandalf.rutgers.edu/pub/sfl/sf-resource.guide.html>

This guide organizes access to science fiction-based books, movies television, awards, trivia, conventions and more. With the help of this resource you can discover the nominees and winners of the Hugo awards, explore Star Trek trivia and more.

NEW ZEALAND INFORMATION

<http://www.cs.cmu.edu:8001/Web/People/mjw/NZ/MainPage.html>

Located at Carnegie-Mellon, this server provides access to a wealth of information about New Zealand including climate forecasts, speeches in the native Maori language and descriptions of the

most ancient of all living reptiles, the Tutara.

TAXING TIMES

<http://www.scubed.com:8001/tax/tax.html>

Presented as a public service by Maxwell Labs, Taxing Times is a repository of tax forms including many IRS publications online. On April 14 there were 10,300 document accesses from 1100+ hosts.

US CENSUS INFORMATION SERVER

<http://www.census.gov/>

This self-proclaimed "Factfinder for the Nation," the Census Bureau's server organizes information such as financial data on state and local governments and schools, poverty in the U.S., and housing changes.

HYPERTEXTED USENET FAQs

[http://www.cis.ohio-](http://www.cis.ohio-state.edu/hypertext/faq/usenet/FAQ-list.html)

[state.edu/hypertext/faq/usenet/FAQ-list.html](http://www.cis.ohio-state.edu/hypertext/faq/usenet/FAQ-list.html)

Organized by Thomas Pine of Ohio State University, this server makes the answers to frequently asked questions (FAQs) about the Internet easy for online users to find.

XEROX PARC MAP VIEWER

<http://pubweb.parc.xerox.com/map>

MapView is a fully interactive application that dynamically renders a map based on user input. It allows people to access geographic and demographic information such as population, exact location and region name.

PIPELINE TO THE INTERNET

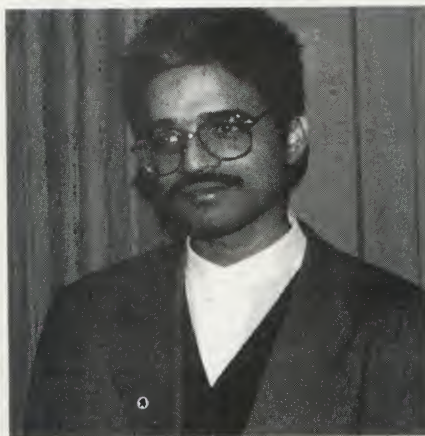
by Brian Gallagher

Nightmares come in many forms. Some wake you up in the middle of the night with visions of ghoulish monsters hanging around in your closet or under your bed, some come in envelopes labeled "bill," and still others, perhaps the nastiest of all come in trying to sort out the TCP/IP, domain name, IP address UNIX conundrum - simply horrifying. There is however, a savior for those wanting to see, and actually use the Internet who aren't well versed in Latin, five or six Slavic languages and UNIX; the Pipeline, in New York City.

PIPELINE, is a company and a Windows interface for the Internet. The software gives users easy, intuitive access to e-mail, (including the ability to attach and retrieve any file connected to an e-mail message), over 7,000 newsgroups, WWW, ftp, WAIS, telnet, gopher, veronica and others.

The program installs to your system under Windows and takes up a minimal amount of disk space, about 1 and 1/2 megabytes. You need to register with the pipeline to gain access, but once you do the world of the Internet is open to you - wide open.

For a demonstration of the system individuals can call the PIPELINE offices at (212)267-3636. They will send you a demo-disk. The software allows users 15 minutes to browse the Internet viewing whatever they like wherever they like, but they will not be able to post any messages or participate in the ongoings of the largest networking conglomeration ever known. For those not local to the pipeline offices (New York City), the software will include a local Sprint



Uday Ivatury bridge aficionado

access number free of charge to demo users.

When using the software it is really hard to believe you're actually on the Internet, with everything written in English pasted to a bright Windows background the only clue that you're not in Kansas anymore is the slew of international addresses that come flashing across your screen - Iceland, India, Norway, Nicaragua, Peru, Poland, Slovakia, Slovenia...

Using veronica, under the "Services" area from the main menu, typing in "hubble" (all lower case, remember the Internet is known to be rather case sensitive), I found no less than 60 files, pictures of various formats, and additional lists from which to choose. If you choose to download three hubble.gifs simultaneously, the software doesn't mind if you multitask using Windows, telnet somewhere else, ftp, chat, gopher or what have you.

By clicking on the "NEWS" icon from the main menu, users have over 7,000

Internet newsgroups at the point and click of a cursor and mouse. Viewing newsgroups, responding to the group or to an individual, tagging a file along to your response from your hard drive or network is all done by point and click. To assist in finding your way back to your favorite newsgroups without having to go through a slew of menus to get there, a bookmark feature is a nicety you wouldn't want to be without.

The limits of this system are most likely going to come from hardware - your hardware, probably your modem. Simply put, there is no limit to what you can do, where you can do it, or for all practical purposes how much of it you can do all at the same time, but the more of it you are doing the longer it is going to take to get it done. What makes this powerful interface tick is the client/server set up of the PIPELINE software.

All of the UNIX work is done at the pipeline offices, with your machine acting as nothing more than a terminal to a larger system. It is what David Holub, sysop and vice president of "HOOKED," a San Francisco Bay Area company which has licensed the software, calls a "virtual SLIP connection." It isn't a standard SLIP connection because you don't have TCP/IP stacks installed and running on your end. This lets the pipeline server do all the real work and leaves hard drive space free to perform other tasks.

Uday Ivatury, is the main programmer for pipeline and also a very big player on the Internet - bridge player that is. Were it not for the game of bridge - pipeline would likely never have existed. Ivatury met author James Gleick at the Manhattan bridge club in New York through a friend of his who is also an author. Gleick introduced Ivatury to the Internet newsgroup **rec.game.bridge**, which contains a FAQ on "okbridge" - an aging but still adored bridge program. For two months the two were regular players of okbridge over the 'net, with Gleick helping Ivatury in navigating the Internet.

While both agreed that the Internet and UNIX was more difficult than it should be, it wasn't until several days of Gleick's e-mail was lost because of an undocumented bug in an offline mail reader that things started funneling towards the **PIPELINE**. With Gleick's prodding, in June of 1993 Ivatury quit his day job as a programmer, and began researching Windows and UNIX, as his familiarity with both was - well, non-existent.

Ivatury, 32, was born in Waltair, India and lived most of his life in Bombay. He moved to the United States in 1978 when he was 17 years old and graduated from the Polytechnic Institute of New York with a degree in Computer Science in 1981. After graduation, Ivatury left New York to work for IBM for the next five years. Missing his friends in the Big Apple, Ivatury left IBM in 1986 and moved back to New York working for smaller computer companies until a little over a year ago when he left to start the PIPELINE venture.

After two months of reading and researching, Ivatury and Gleick settled on writing the PIPELINE software in Microsoft Visual Basic because, Ivatury said, "It seemed to require much less knowledge of Windows internals, and Gleick promised to help me." As far as learning Windows and UNIX, Ivatury, who thinks of programming as "putting bricks together," didn't find it all that difficult. "The bottom line is that when push comes to shove a programming language is a programming language," he said, "and an operating system is an operating system." As far as Windows itself goes, Ivatury said, "I'm still not sure that I like it all that much, it has this nasty habit of crashing - but you get used to it."

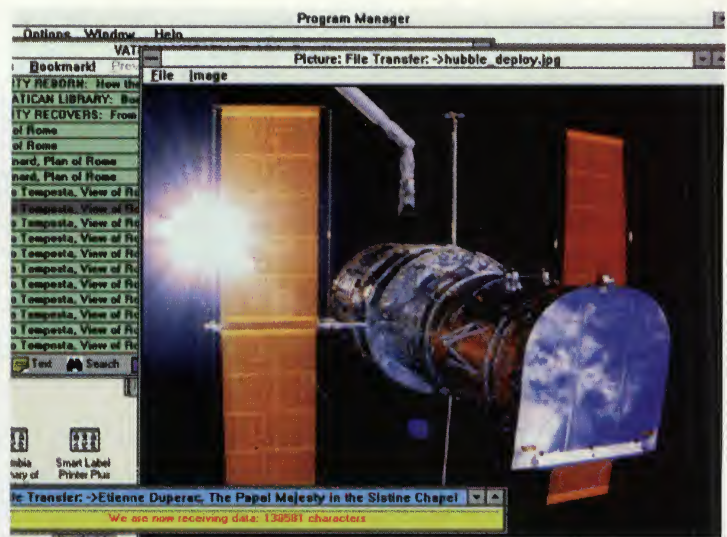
Working tenaciously the pair went online in November 1993, and now have 16 employees - all but three are bridge players. Ivatury said he actively pursues hiring bridge players as the game

he said, "programming is a way to get there."

The PIPELINE offices currently have six UNIX SUN machines on the public network and an equal number for employees. At one point they were running 1,000 people on a single 56 kbps leased line, Ivatury said, and today have a T-1 servicing the Internet and a fractional T-1 for a Sprint Net connection. At this time the service has over 100 modem lines, all 14.4kbps, and over 3,000 subscribers many who are from Europe.

The reason for the wealth of European subscribers Ivatury attributes to local phone calls in Europe being exorbitantly expensive, and a lack of access to the Internet in general. By using a Sprint connection to the PIPELINE, overseas onliners get the access they want at a price they can afford.

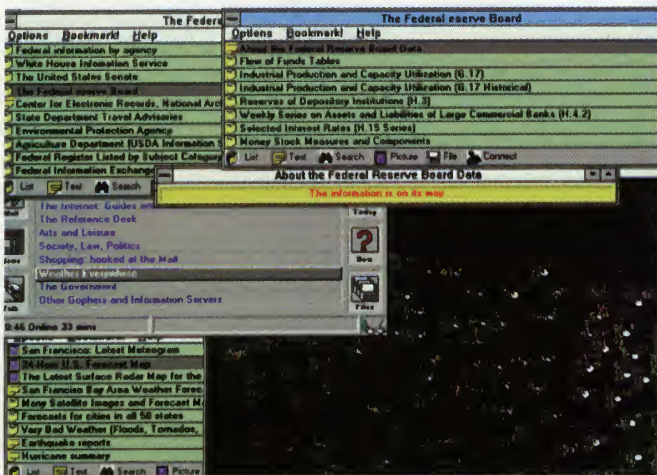
Not quite overseas, but arguably as foreign to New York as Singapore or France, a version of the pipeline software is up and running on the west coast too.



Holub, born in Milwaukee, Wisconsin, and a graduate of the University of Wisconsin, Madison, with a degree in political science and history, looked to the Internet as a viable future after a short stint in sales, a four and a half year affair with commodities trading - where he gleaned much of his initial knowledge of computers, and another sales position with Tangent Computers where he worked with the networking side of PC computers.

When he decided to play around the Internet, Holub began a three month period of reading, researching and testing a UNIX machine he was putting together. By June of 1993 he had it running at a level he deemed acceptable. In working with UNIX he was repeatedly frustrated by the complexity of getting functional on the Internet, this sent him looking for what turned out to be PIPELINE, and he found them the day they opened - November 31, 1993.

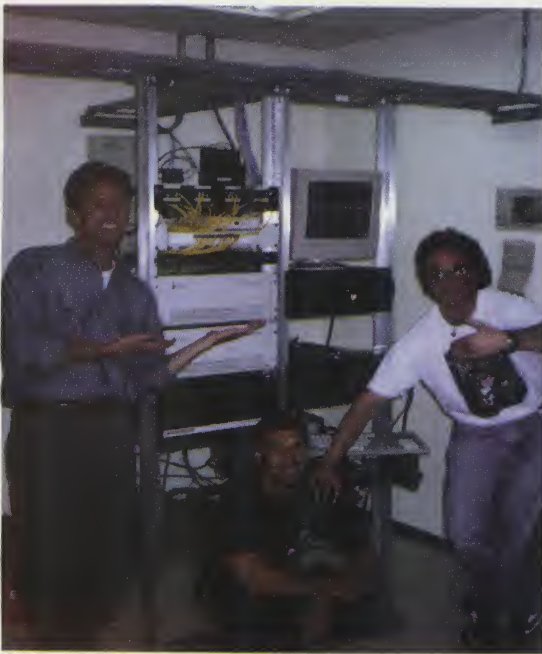
Open for business in April, HOOKED now claims a rapidly expanding subscriber base of 700. For the most part technical support calls are largely limited, over 90 percent, to giving callers new initialization strings for their modems. Currently hooked has 48 modem lines HOOKED to a U.S. Robotics digital modem rack fed by two T-1s, and they are looking to add more lines in the near future. An additional T-1 is utilized for Internet bandwidth running on two UNIX Pentium 66 machines with 48 MB RAM on one machine and 32 MB RAM on the other, connected to two Livingston terminal servers and a Cisco router.



requires a certain intelligence level and is very team or project oriented making them ideal employees for a company such as his. He describes himself and Gleick as fanatical bridge players who travel to as many bridge tournaments as possible, "This (bridge) is our life,"

In San Francisco, David Holub has positioned himself to utilize the pipeline software to assist perhaps 20,000 simultaneous users by very, very carefully choosing his location. Location, location, location. His company, HOOKED, is nestled in a 750,000 square foot office building, with Teleport Communications Group, Bittel, GTE,

Metropolitan Fiber Services, Sprint, Centex and other communication conglomerates for neighbors. Directly through the drywall in his office, he said, is a 4ES Switch belonging to Bittel's Northern Telecom with 70,000 T-1s in it.



David Holub (far right) at Hooked

Holub described the PIPELINE interface as a "palette" to be developed and customized on a whim. One of the things he is doing is adding a list of all BBSs that wish to be accessible through HOOKED via telnet - if your board qualifies, please contact him with the information. The HOOKED offices has a staff of nine, but much of the programming is done over the Internet by programmers world wide, a benefit Holub particularly enjoys. The most popular area on his service are the USENET newsgroups, "with out a doubt," he said, with over 80,000 daily postings HOOKED collected a gigabyte of news in just three days.

For those without a local number through a service such as Sprint, the system supports "rlogin" or "remote log in" access through the Internet. If you have access to a UNIX machine which is rlogin capable you can use that account to save on long distance calls by using the Internet as your phone line.

To use rlogin, start the hooked (pipeline) software and choose "Dialing and modem set up" in the "Options" scroll checking the box at the top of the screen that says, "Dial another site and then log in remotely," then press "OK." From there go to the "Connect" option, enter your hooked or pipeline password and hit "OK" again. The system will prompt you for the telephone number of your Internet (rlogin) provider. Once entered you will connect to your local Internet site and do your normal log on

procedures using the hooked terminal software.

While on your local service go to the area of the board where you find a UNIX prompt. At the UNIX prompt type in "**rlogin -8 -l**" (user name on HOOKED or PIPELINE) **remote.pipeline.com,** or **get.hooked.net** this should put you through to the pipeline in New York, or hooked in San Francisco. (Note, "-l" in the preceding rlogin address is a minus sign followed by a lower case "L.")

Users can telnet to either service but, they will not be able to use the pipeline software when doing so - they will however, be able to ftp the software from the site, but a user ID and password must be set up with the respective company before the software will be activated on at their site. Telnet, gopher, ftp addresses are **pipeline.com** and **hooked.com** respectively.

The rates, at \$20 per month for 20 hours, or \$35 monthly for unlimited time for the PIPELINE, and \$22 per month for 20 hours, or \$35 monthly for unlimited time for HOOKED, are a much better deal than getting a SLIP connection, but considerably more than some BBSs out there. But, when you've got the whole world at your fingertips and it's this easy to get to, many will consider it a bargain.

For more information contact the pipeline, voice: **(212)-267-3636**, to download their software: **(212)267-8606**, or write: The PIPELINE, 150 Broadway, Suite 1710, New York, NY 10038. HOOKED, to download their software: **(415)276-0150**, login as "download" with the password "ldownload." voice: **(415)281-6550**, send e-mail: **staff@hooked.net**, or write: HOOKED, 185 Berry Street, Lobby 2, Suite 6650, San Francisco, CA 94107.

IRC - 5000 Channels of Global Chat

By Alan D. Bryant

Our friends in the federal and state governments are tasked with spending our hard-earned tax dollars on things of importance. Things like breeding special strains of tomatoes that make better ketchup. Or studying the

breeding habits of Australian pygmy rats. And of course we're all familiar with the toilet seats which cost you and me \$14 a piece at the local do-it-yourself warehouse, and for which the government preferred to pay in excess of \$150 each. To these venerable expenses I happily add **Internet Relay Chat (IRC)**. Your tax dollars are at work here, and if you're smart, you'll get involved before they decide to spend the money on something stupid and trivial, like patching those potholes on the interstate. Sound like more Clintonomics? Well, the story's not quite that grim...

What is IRC? Nothing short of a 24 hour a day international chat orgy. If you've been witness only to BBS-based chat, even nationwide BBS chat links, you've only been playing in the minor leagues of the chat world. Playing in IRC is playing in the majors — this is the real McCoy, the genuine article. A place where 5,000 or more people around the world are chatting with one another in over 1,000 different channels. Where you can be chatting in multiple channels at once, sending a GIF file of yourself privately to another user, and having a private discussion with still another user — **ALL AT THE SAME TIME**. Sound like fun? It is, and if you like to chat and haven't seen IRC yet, get with the program.

IRC has actually been available for several years now, but has been accessible only to the privileged few with direct Internet connections or shell accounts on systems that do. The availability of TCP/IP stacks and Internet client suites on the Mac, and more recently for PCs with Microsoft Windows, coupled with the popularity of shell accounts from sources like Delphi, has caused rapid growth in the awareness and accessibility of IRC.

I first became acquainted with IRC when I began playing around with **WINSOCK** and Windows-based client software following Jack Rickard's Boardwatch article about **WINSOCK** in March of this year. **WINSOCK**, (itself a standard for implementation and not a program per se), forms the basis for direct Internet connections in the PC/Windows environment. Patterned after the "sockets" concept, long a part of the TCP/IP networking world, **WINSOCK** brings a remarkable level of accessibility to Windows users who are fortunate enough to afford direct connections to the Internet.

WINSOCK requires TCP/IP over Ethernet, or in some implementations (such as the Trumpet WINSOCK) a SLIP account from an Internet provider. Both of these types of connections are outside the reach of the average user, even today. Few people are likely to have a TCP/IP LAN in their home, and with prices averaging \$250 a month for a SLIP connection, few people are likely to justify such an expense for casual chatting.

Like many people you find on IRC, I got my access "free" (to me, anyway) from my employer, eSoft (makers of TBBS). While in development on our upcoming Internet Protocol Adapter (IPAD), I managed to coerce my boss (Phil Becker) into letting me use one of our test lab phone lines to connect to the IPAD at the office via SLIP. Phil setup a SLIP account for me in the IPAD, I connected the phone line, and it was ready to run. All done with the understanding that I was doing important research for the IPAD project, my motives shifted dramatically once I discovered IRC.

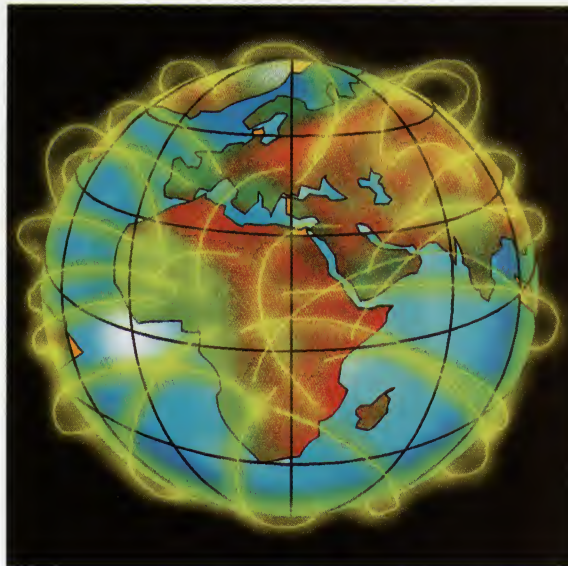
Back at home, I ftp'd the Trumpet WINSOCK and a few clients using the Internet shell account I have through Colorado SuperNet. Once installed and connected with my SLIP account to the IPAD at eSoft (which all went pretty smoothly given Jack's March article on the subject) I was able to ftp files directly to my own hard drive, bypassing the usual "ftp-then-download" I was familiar with on my shell account. Once I could do that, and use my own Archie client right from Windows, I tracked down several additional clients — including the IRC client, WSIRC, a shareware client written by Caesar Samsi, an Indonesian expatriate who enjoys Windows programming.

Installing and running the IRC client was the beginning of a downhill slide into lost productivity. Although I resisted playing with it at work, it became increasingly difficult to get anything done at night or on the weekends.

IRC itself is like one enormous chat system. At any given moment, there are over 1,000 channels, each purportedly on a different topic, available to IRC users. You can obtain a complete listing on demand, and join any channel you

wish. All the channels have names — eight characters long (or shorter) in most cases, although they can be much longer. Many channels have descriptions as well, although most don't (it's up to the channel operator—more on that in a moment).

If there doesn't seem to be a suitable channel available (unlikely, given that there are always over 1,000 to pick from) you can create your own on-the-fly, simply by joining a channel that doesn't exist and provide a new name for it. When you do this, you become channel operator, and can kick people out of your channel at will, or lock-out other from joining in. You can also give others in your channel "ops" status, so they can enjoy the same super-user privileges over that channel too.



This brings up an interesting concept common with IRC — bots. That's short for robots, which as the name suggests are robotic users. You don't always know who the bots are (except that they're almost always channel ops). Their purpose is straightforward enough, that being to sit in a channel and keep it from going away. As long as people are in a channel, it can't go away, and because bots can sit there forever, you begin to notice channels that are always available, making them permanent fixtures that are analogous to the sysop-defined channels you might find on a BBS.

Bots have other interesting characteristics, too. Sometimes they "talk" to you, but more often you'll find bots that

make channel announcements. For example, some bots give brief personal profile information when a particular user enters the channel. That information is supplied to the bot by the user in question using the private message command in IRC. Once set, every time the user enters the channel, the bot sends a message to everyone in the channel with the stored profile info.

When you're in IRC, you set a nickname (usually called a "nick") of your liking, eight characters or less. There is no permanent storage of nicks; they're yours only as long as your IRC session lasts. Once you logout, someone else can login with the same nick. Most people endeavor to be creative when selecting nicks to reduce the possibility that someone else will parade around as them, but there's nothing inherent to IRC to prohibit it. You are also free to change nicks on the fly in chat.

The appeal of IRC is difficult to explain. Part of it is that technologically, it's chat at a whole new level. To begin with, because of the design of IRC itself, TCP/IP networking in general, and the IRC Windows client, it is possible to participate in as many different chat discussions as you can manage. Simply join the channel(s) you want to participate in. Samsi's Windows client for IRC just pops open another window on the screen, each with three panels: one that shows all the chat discussion, one small area where you type in what you want to say, and a third that lists the users in that channel. Just click to change windows to type something into a different channel.

Private chat is handled the same way; each private chat you may have going has its own window. This can get a little exciting when you're joined into two public channels and talking privately to two or three others at the same time.

One of the most appealing aspects of IRC is CTCP — the client to client protocol. CTCP is a collection of features that let you do nifty things between two clients (i.e., you and another IRC user, wherever on the planet they may reside). IRC traffic is normally carried through an elaborate network of IRC servers, most of which reside on college campuses. But CTCP

transactions take place from client to client, using the Internet network, but bypassing the IRC servers. Although you can chat privately in IRC (which goes through servers) you can also chat privately via CTCP (called DCC chat, for direct client to client).

But the really neat part is DCC send — a mechanism that lets you send a binary file directly to another IRC user's machine. When you start a send, the recipient can choose to accept or decline your transfer request. If accepted, the file transfer starts, all while you continue to chat with everyone. In many channels on IRC, the DCC send function is used to exchange user GIF files. "Wanna know what I look like?" A yes answer, and off starts another DCC send.

Finally, being able to chat in multiple windows with an IRC client, while transferring a file with an ftp client, and telnetting to a system with another client, all at the same time, all on the same machine, and all using the same single Internet connection is a pretty overwhelming "cool burst" of connectivity excitement. A dial-up SLIP line has an upper data capacity limit, of course, but a 14.4 or 28.8 bps SLIP connection can handle a fairly good volume of traffic. People have been wanting multisection capabilities with BBSs for some time, such as downloading a file in the background while entering e-mail. While BBSs haven't quite arrived there yet en masse, using WINSOCK and a suite of Windows based Internet clients fulfills that need today via the Internet.

The only down side to IRC is the type of traffic that moves through it, and the complete lack of controls to prevent either the traffic or access to it. Some of the channels on IRC are adult in nature, and even in the ones that aren't, people are free to use whatever language they want. Although I'm not personally offended by any of it, it does concern me that the underage set can access IRC and all its channels (including the adult ones) as easily as anyone else. All they need is direct Internet access, through a shell account or direct connections, and they're in. Some channels are "invitation only" by the choice of the channel op, which does impose some controls. But these days, the world is an inherently unsafe place for our children — "parental guidance suggested" — and in that regard, IRC is no different than any other entertainment or media source.

Despite the wide range of traffic you'll find on IRC, the vast majority of it is rather tame, and all of it is wonderfully enjoyable for the "chat interested" among us.

The other rather interesting concept about IRC is that our tax dollars and tuition funds are what's paying for this chat free-for-all. IRC servers, which are used to pass all the IRC traffic, are located primarily at university computing centers around the world. My advice is to join in and have fun — your tax dollars are paying for it, you may as well use it.

Trumpet Winsock, Peter Tattam, Trumpet Software International, GPO Box 1649, Hobart, Tas, Australia, 7001, **61-002-487049** Fax. (Available as WINSOCK.ZIP from ftp sites.) WSIRC Windows IRC Client, Caesar M. Samsi, 72030.562@compuserve.com E-mail. (Available as WSIRC13A.ZIP from ftp sites.)

[Editor's note: Alan D. Bryant is a contributor to Boardwatch, and author of the book *Creating Successful Bulletin Board Systems*, published by Addison-Wesley, ISBN 0-201-62668-3.]

IRC SERVER LIST

Like most chat systems, IRC has a set of commands you enter to invoke particular functions, such as private messages and channel lists. Some IRC commands are sent to the server for action, while others are processed by the client you're running. Client commands vary; server commands are standardized. All are entered the same way within IRC; you simply begin the line with a forward slash, followed by the command verb and any applicable parameters.

Before trying to use IRC, you should learn about the server commands available. There are tutorial and primer files available via ftp from cs.bu.edu. The tutorial.* files (three total) you'll find there offer a great introduction to IRC and its command set.

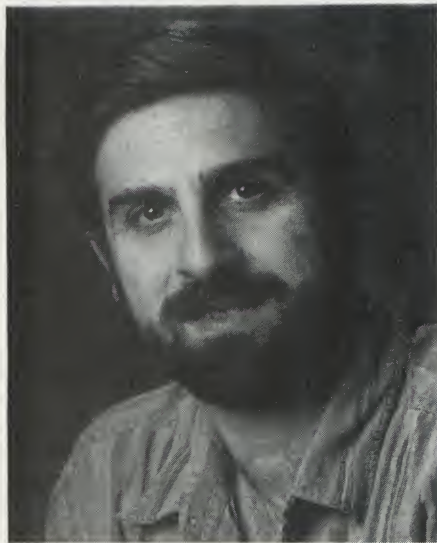
When you run your own client, such as Samsi's WSIRC, you'll need to configure it to connect to a specific IRC server. (Clients on interactive accounts from sources such as Netcom and CSN are generally pre-configured to attach to an appropriate server.) Some IRC servers are available only to authorized users, while others are public. Below is a list of IRC servers — some private, some public. You may not be able to use all the servers listed here. This list is maintained by Chuck Kane, ckane@ece.uiuc.edu, and is posted regularly to the alt.irc.newsgroup, and is available via ftp from h.ece.uiuc.edu as /irc/servers.*, where the * is the year, month and day the list was produced. IRC servers are added and dropped with some regularity, so this list may not be 100% accurate when you're reading it.

The list is sorted by country. United States IRC servers are at the end of this list by state. The two columns show the server name, and the name of the site where the server is located.

Israel birisc.cs.biu.ac.il irc.tau.ac.il irc.technion.ac.il	Bar-Ilan University Tel-Aviv University Technion, Haifa
Japan dec504.aist-nara.ac.jp wsclark.huie.hokudai.ac.jp hemp.imel.kyoto-u.ac.jp totto.ics.kula.kyoto-u.ac.jp scorpio.cse.kyutech.ac.jp akiu.gw.tohoku.ac.jp mamiko.is.s.u-tokyo.ac.jp irc.ube-c.ac.jp mental.Hakozaki.karrn.ad.jp endo.wide.ad.jp hamlet.wg.omron.co.jp omrongw.wg.omron.co.jp scslwide.sony.co.jp biscuit.mmws.astem.or.jp choshi.kaba.or.jp wings.tokai-ic.or.jp	NARA Institute of Science and Technology Hokkaido University, Sapporo Kyoto University Faculty of Human Studies, Kyoto Kyushu Institute of Tech., IIZUKA Tohoku University Tokyo Dept of Computer Science, Ube College KARRN Hakozaki NOC WIDE-NOC of Fujisawa OMRON Corporation, Kyoto OMRON Corporation, Kyoto Sony Computer Science Laboratory, Inc. Kyoto KABA, Kyoto TRENDY YAMAZATO-NOC, Nagoya
Singapore solar.cc.nus.sg	The "FINE FINE" Country
Australia aquarius.cssc-woll.tansu.com.au yoyo.cc.monash.edu.au edna.cc.swin.edu.au yamabico.cs.uow.edu.au rabble.uow.edu.au irchat.utas.edu.au notjules.itd.uts.edu.au fox-in.socs.uts.edu.au gwen.st.nepean.uws.edu.au kay.st.nepean.uws.edu.au jello.qabc.uq.oz.au	Telecom Australia Server Monash University [The Biggest in OZ!] Swinburne University of Technology Uni. of Wollongong Uni. of Wollongong University of Tasmania Finally a 2.8" version that works As if sbug didnt have enough problems An AT Standalone a machine which struts University of Queensland
Austria uni-linz.ac.at itc.univie.ac.at olymp.wu-wien.ac.at	Johannes Kepler University Linz Alma mater Rudolphina Vienna
Belgium Othello.UIB.ac.Be is1.bfu.vub.ac.be	Ecole Polytechnique (ULB-Bruxelles) Vrije Universiteit Brussel
Croatia smile.srce.hr	University Computing Centre Zagreb
Czech Republic irc.praha.cz	Praga Caput Regni
Denmark alk.iesd.auc.dk	Aalborg University, IESD
Estonia marvin.cc.ttu.ee	Tallinn University Computer Science Dep.
Finland irc.eunet.fi serifos.helsinki.fi irc.cs.hut.fi irc.freenet.hut.fi cs.jyu.fi mopo.cc.lut.fi irc.otol.fi rieska oulu.fi tolsun oulu.fi irc.ttl.fi irc.cc.tut.fi vehka.cs.uta.fi polaris.utu.fi brando.uwasa.fi	EUnet University of Helsinki Helsinki University of Technology Freenet University of Jyväskylä Lappeenranta University of Technology Oulu Institute of Technology Universtas Oulunsivu, Finlandia Vodka Universtas Oulunsivu, Finlandia Vodka Turku Telephone Company, Turku TUT Computer Centre University of Tampere University of Turku University of Vaasa

France cnam.cnam.fr Dafne.Mines.U-Nancy.FR	Conservatoire National des Arts et Metiers Ecole des Mines de Nancy		
Germany fu-berlin.de TU-Muenchen.DE Uni-Erlangen.DE Uni-KL.DE Uni-Paderborn.DE Uni-Rostock.DE uni-stuttgart.de	Freie Universitaet Berlin TU Muenchen The 'Berch'-Server Kaiserslautern University University of Paderborn Rostock Stuttgart University		
Hungary darmol.elte.hu	Eotvos University of Budapest		
Latvia kristin.cclu.lv	Latvian IRC Server		
The Netherlands irc.sci.kun.nl svbs01.bs.win.tue.nl	Nijmegen, The Netherlands Technical University of Eindhoven		
Norway alf.uib.no mimir.ifi.uio.no irc.cs.uit.no irc.nvg.unit.no	Universitas Bergensis, Ordinateurus Centre Universitas Osloensis University of Tromsøe Nettverksgruppa - Universitas Nidrosiensis		
Poland galaxy.uci.agh.edu.pl irc.fuw.edu.pl ruby.poz.edu.pl	AGH Krakow Warsaw University, Warsaw Technical University of Poznan		
Russia irc.demos.su	DEMOS/* Russian IRC-Server		
Slovakia irc.tuzvo.sk	TU Zvolen		
Slovenia irc.arnes.si	Fastest growing userbase in Europe!		
Spain pleione.cc.upv.es	El Primer Servidor de Espana		
Sweden gwaihir.dd.chalmers.se Saturnus.pt.hk-r.se irc.nada.kth.se krynn.efd.lth.se	Chalmers Tekniska Lekskola, Giteborg SoftCenter, Ronneby Royal Institute of Technology, Stockholm Lund Institute of Technology		
Switzerland disuns2.epfl.ch firewall.epfl.ch irc.ethz.ch ircserv.imp.ch cuisund.unige.ch	Swiss Fed Inst of Tech of Lausanne Swiss Fed. Inst. of tech of Lausanne Swiss Fed Inst of Tech of Zurich Improvware AG, Fuellinsdorf University of Geneva		
United Kingdom serv.eng.abdn.ac.uk shrug.dur.ac.uk stork.doc.ic.ac.uk cent1.lancs.ac.uk supercomputer.swan.ac.uk fennel.compnews.co.uk dismayl.demon.co.uk	University of Aberdeen University of Durham Dept of Computing, Imperial Coll., London NONE Swansea University Computer Society PressNet Hub Demon Internet, London		
Canada sifon.cc.mcgill.ca arlene.cs.mun.ca elk.nstn.ca irc.polymtl.ca io.org	McGill University, Computing Centre Memorial University of Newfoundland NSTN's Atlantic Canadian IRC Server Montreal Polyserver Internex Online		
Mexico hp9k.lag.itesm.mx next00.mty.itesm.mx risc6k.sin.itesm.mx irc.pue.udlap.mx	The Tutifrutti Server, ITESM Laguna ITESM Campus Monterrey, Mexico Hub ITESM Campus Sinaloa Universidad de Las Americas, Puebla		
Chile UNIREDD	El primer irc-server de SUDAMERICA		
Alaska merlin.acf-lab.alaska.edu Server	The "Patrick has a Glue Dream" Alaskan Server		
California nova.unix.portal.com highway harp.aix.calpoly.edu B-w6yx.stanford.edu C-w6yx.stanford.edu w6yx.stanford.edu othello.ucdavis.edu ucsd.edu	The pothole in the information super- highway The SLOer than you server... Stanford Client server No.1 Stanford Client server No.2 From DC to Daylight University of California, Davis Univ of Calif San Diego		
Colorado irc.Colorado.EDU	Univ of Colorado Server		
Florida excalibur.mlb.semi.harris.com irc.math.ufl.edu	Warlord Server, Melbourne The Happiest Server on IRC		
Illinois irc.ecn.bgu.edu Computing irc.acns.nwu.edu irc.uiuc.edu		Board Of Governors, Educational Northwestern University, Evanston University of Illinois at Urbana-Champaign	
Indiana Irc.Indiana.Edu copper.ucs.indiana.edu		Indiana University Primary IRC Server Indiana University Primary IRC Server	
Iowa irc.iastate.edu		Iowa State Alternate Reality Server	
Kansas irc.ksu.edu		Kansas State University	
Kentucky irc-host.ms.uky.edu		The Hole in the Rock Server Univ. of KY	
Maryland irc.digex.net		Digital Express Group	
Massachusetts world.std.com berry.cs.brandeis.edu csa.bu.edu csz.bu.edu husc10.harvard.edu irc.mit.edu wpi.wpi.edu		The World @ Software Tool & Die Brandeis University IRC Server Boston University, Boston Boston University CS SC1000 server If we're up, then all is well :-> MIT Project Athena Worcester Polytechnic Institute	
Michigan hobbes.kzoo.edu coyote.cs.wmich.edu		Kalamazoo College WMU, Kalamazoo	
Minnesota irc.tc.umn.edu		University of Minnesota, Twin Cities	
Missouri sluaxa.slu.edu		St. Louis University	
New Jersey hertz.njit.edu pilot.njin.net		Computing Services Department, Newark Rutgers Univeristy New Brunswick	
New York azure.acsu.buffalo.edu red-dwarf.cit.cornell.edu mcphy0.med.nyu.edu colossus.cs.rpi.edu mothra.syr.edu		University at Buffalo, Buffalo The CIT IRC The Mid-Manhattan Link Rensselaer Polytechnic Institute IRC Server Syracuse University	
North Carolina hobbes.catt.ncsu.edu		North Carolina IRC Server	
Ohio slc9.ins.cwru.edu		CWRU IRC Server	
Oklahoma lincoln.ecn.uoknor.edu		SOONER HUB SERVER	
Oregon irc.csos.orst.edu		The Beaver Server of The Northwest	
Pennsylvania irc.lm.com irc.duq.edu irc.pitt.edu chestnut.chem.upenn.edu		Telerama IRC Server Duquesne University, Pittsburgh University of Pittsburgh University of Pennsylvania QUANYIN	
Texas irc.bga.com irc.metronet.com hermes.oc.com ra.oc.com acme.etsu.edu irc.tamu.edu omega.tamu.edu dewey.cc.utexas.edu weiss.che.utexas.edu		Real/Time Communications, Austin Texas Metronet Inc. OpenConnect Systems OpenConnect Systems Server, Dallas The Magical Realms Server Texas A&M University IRC server Da' Maroon Lagoon of Aggieland! UT's "I Repeat Class" server University of Texas at Austin Leaf Server	
Utah hamblin.math.byu.edu		Brigham Young University Math Dept	
Virginia beta.cs.jmu.edu muselab.ac.runet.edu poe.acc.Virginia.EDU		James Madison University CS Dept. Radford University University of Virginia	
Washington irc.eskimo.com alfred1.u.washington.edu		Eskimo North. Located in Seattle U of W IRC Server - Fish are cool, huh.	
Washington, D.C. eff.org		Electronic Frontier Foundation, G. St , D.C	

THE REAL-LIFE ADVENTURES OF THE INTERNET TWINS



TRACKING THE WILD ZINE

by Harley Hahn and Wendy Murdock

Zine. We love that word. Feel it, as it starts in the middle of your mouth and just rolls slowly off the front of your tongue. Zine, zine, zine... No doubt about it. Zines are cool, unique creatures of the 90s, the beginning of the new frontier. We believe zines to be so important in so many unexpected ways as to deserve to be considered as a brand new form of creation — one that has flourished only in the last year or so. As we ponder the nature and success of zines, we are led to some fascinating and remarkable observations: First, that it is impossible to create “cool,” no matter how much money you spend. Second, that the current neo-conservative theory, in which the profit motive is the best ethic upon which to base our economic and social system, is just plain wrong. And finally, that although zines are created all over the world, the underlying concept is very American and takes us back to the myths of the Old West. Now, more than ever, zines show us why America needs cowboys. So, what then is a zine?

THE NAME “ZINE”

The name “zine” was derived from the term “fanzine,” a type of small magazine published for fans of particular areas of the underground culture. There have been fanzines devoted to music groups, cult writers, science

fiction genres, and so on. The name fanzine, of course, is an abbreviation for “fan magazine.” Traditional fanzines are printed on paper, and are often no more than a few photocopied pages. Within recent years, the fanzine has evolved into the zine: a small, single-purpose publication. Most zines are written and produced by one fanatical person (or, at most, a small group of fanatics). A typical zine is esoteric to the max, appealing to a well-defined subset of humanity. Most printed zines are either free or sold for a very low price (say, a dollar). Indeed, many zine publishers care more about being read than about making money, and will send you a zine for free if you send them a self-addressed stamped envelope. So much for ancient history. With the popularity of the Internet, we now have a whole new class of publications. Although we refer to them as “zines,” they are really a brand new type of creation. The new zines are designed to be distributed and read electronically. Unlike their counterparts (printed on paper), today’s zines can be readily distributed around the world in hours. Moreover, using the vast resources of the Internet, a zine publisher can reach out effectively to those few people who are interested in any esoteric topic, no matter where they happen to live. At first, the new zines were simply electronic versions of the older, printed ones. (In fact, some people used to refer to such early publications as “e-zines.”) However, it was not long before people started using the unique features of the Net and electronic text to create publications that designed specifically for the Internet and its users. Thus, for our purposes, we can define a “zine” as a small, electronic publication, devoted to a single topic, published by one person (or at most, a few people), and distributed for free over the Internet. (Note: The term e-zine is now obsolete; the correct term is zine. If you want, you can still talk about e-zines, but you will be branding yourself as being hopelessly atavistic.)

THE LAW OF COOL

In a moment we will discuss the hows and whys of reading zines but first, let us reflect on the name just a little longer. The name zine is the last syllable of magazine (or fanzine if you wish). In this way, the name zine reminds us of two similar names: droids and toons. (The word “droid” is the last syllable of “android”, and “toon” is the last syllable of “cartoon”. These two neologisms are both movie terms: from Star Wars and from Roger

Rabbit respectively.) It is interesting to ask, why are zines cool (as you will see when you start to read them), but droids and toons are not? The words droid and toon did not become popular on their own. Rather, the people marketing these movies tried their best to make these new words cool in an attempt to promote the movies (and to make more money), but it didn’t work. No one goes around talking about droids or toons, but people DO talk about zines. Personally, we think that this is great. No matter how much the men and women in suits try to change our culture to earn a few more bucks, they cannot create coolness where it does not exist. The Law of Cool says that a great idea will become cool by itself or not at all. And that is what happened with zines.

READING A ZINE

Why would you want to read a zine? Well, why would you want to use the Internet in the first place? Aside from the obvious reasons — reading jokes, and finding out about sexual experiences that you will never get near in real life — we generally use the Internet to plug ourselves into a global community consisting of millions of people. The variety of zines available today is so vast as to be beyond the understanding of a single human being.

Simply put, zines offer you a chance to read stuff that you would never encounter, anywhere else in your life. For example, in your everyday, non-Internet life, are you likely to happen upon a magazine named “Cult of the Dead Cow”, or a short but pithy publication named “Holy Temple of Mass Consumption”? On the Net, these zines, and many more, are available for free, whenever you want.

So, how do you find zines? They are published using the well-known distribution systems of the Internet. Many zines are posted to Usenet newsgroups, the most important such newsgroup being **alt.zines**. You can also download zines via anonymous ftp, find them using a gopher or the web, or subscribe to zines distributed via a mailing list. In the resources section at the end of this article, we will show you specific places to find zines. When you find one you like, all you have to do is download it (or subscribe to it), and read it in the usual manner. Most zines are regular ASCII text that you can read with your favorite paging program or text editor. However, a few zines are published in Postscript, which will require a special

viewer program to read or a Postscript printer if you want a hard copy. In recent months, we have begun to see a number of zines published via the web. Such zines are rendered in the web's lingua franca: HTML (hypertext markup language). To read these zines, you will have to use your favorite web browsers (such as Mosaic or Lynx). If a zine contains graphics as well as text, you will have to use a graphical browser (such as Mosaic and not Lynx) to appreciate the full impact of the layout and artistry.

PUBLISHING YOUR OWN ZINE

Once you start reading zines, you may begin to think about publishing your own. Good. Zines are cool, and the world supply of cool has seriously diminished since Alice Cooper decided to go on Hollywood Squares. So here are some hints as to how to go about starting your very own zine: Publishing a regularly-scheduled zine is a lot more work than you might think. Unless you have experience and a lot of time, you will find it difficult to come out with more than two or three issues a year. This is especially true if you intend to do a lot of editing and keep close control over the quality of your articles. One important point to remember is that all writers (even famous Internet writers) tend to miss deadlines, and that counting on other people to submit articles on time is a good way to grow old fast.

Before you even start planning your zine there are three things that you should do. First, check out the master list of zines that already exist (described in the Resources section, later in this article). Before you start your own zine, it is a good idea to see what other people are doing in related areas and to ascertain what is already available. Next, download and read a variety of zines. The more you read, the more ideas you will get and the less chance that you will start your zine career by making a once-in-a-lifetime-stupid-mistake (such as trying to start yet another zine covering popular music). The nature of zines is that they are more fun — and more successful — when you write about subjects that you understand intimately and that are of interest to a well-defined, focused group. For example, if you live in Southern California (like Harley), you might start a zine devoted to a discussion of why so many Californians are good looking, smart and athletic. If you are from, say, Arkansas (like someone whose name we won't

mention), you could write about cow-tipping techniques and the best way to fry tator tots in bacon grease. The next step is to start reading the appropriate Usenet discussion groups. For example, if you want to start a zine about obscure sexual practices, reading the relevant Usenet groups will orient you to people's likes and dislikes. In addition, you will encounter the abbreviations and expressions that are in common use, and you will develop a feeling for which important niches are as yet unfilled. Best of all, if your boss (or mother, or significant other) asks why you spend so much time reading articles about spanking and horses, you can explain that you are working on legitimate research for your zine. Some zine publishers opt to write the entire zine themselves (such as Jack Rickard did when he first founded this magazine). Some publishers use other people's work as well as their own (such as Jack Rickard did when he started to go crazy from writing the entire magazine by himself). If you want to solicit submissions, start by posting a note to **alt.zines**. The note should be short and to the point.

Briefly describe your zine (title, contents, schedule) and your submission guidelines. Explain what types of articles are you looking for: What size should they be? Do you have any special formatting requirements? A word of advice: No matter how hot to trot you may be, do not post your first solicitation until you have read the **alt.zines** group for a while. This will allow you to see how the zine world works and will give you a chance to pick up some ideas from other people. When you do post your first such article, make it clear that you are starting a NEW publication and looking for submissions. Otherwise, you will have people sending you requests for a zine that does not yet exist. Once you have announced your zine and asked for submissions, wait for a week or so and see what requests you get. If you get a fair response from **alt.zines**, you can assume that there is at least some interest in what you are doing. If you still need more submissions for your first issue, the next step is to post a similar request for articles in other, relevant discussion groups. For example, if your zine is about cooking, this would be the time to ask for submissions from the Usenet cooking and recipe groups. Again, remember to word your request carefully: do not announce that the zine is available until you are ready to send it out. The reason that you should post first to

alt.zines and wait a while before posting elsewhere, is to give the fanatics of the zine world a chance to comment on your proposed publication, as they may have important suggestions. The comments you receive can save you a lot of misguided effort. For example, you may discover that another person is publishing their own zine on exactly the same topic. Not that you can't publish a similar zine as well; it's just that it pays to know what is out there before you spend your time duplicating someone else's work.

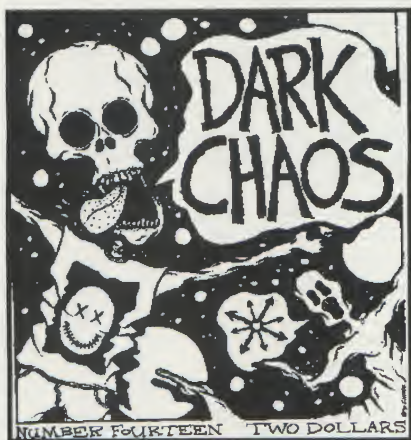
Hint for soliciting material for a zine:

It is easy to get people to contribute poetry to a zine. One request will usually result in enough poetry to supply the Peruvian army for a year. It is not so easy to get good poetry.

Once you have the articles for your zine, you must put them in the form of a file that can be easily transported around the Internet. As we mentioned, most zines use plain ASCII text. Although some zines use Postscript or HTML (web language), we suggest that you stick to plain ASCII. This will ensure the largest possible audience for your zine. Designing and laying out a zine in an attractive format will take a little practice. We suggest that you study other people's zines to get ideas. As a general principle, keep it simple. Remember, most people will be reading your zine on a screen that will show them 24 lines of text at a time, each line being no longer than 80 characters. Please resist the temptation to get fancy. If you study various zines, you will notice that they change through time, evolving towards a style that best fits the zine and its contents. Make it easy for people to read what you have to say, or they may decide not to bother at all. For example, always include a Table of Contents at the beginning of the zine so people can decide, straight off, which articles they want to read. And to make it simple for your readers to find the articles, preface each one with a unique pattern that they can search for, such as (-1-), (-2-), and so on. Again, look to other established zines for ideas.

DISTRIBUTING YOUR ZINE

At the same time you are planning your first zine issue and soliciting and editing contributions, you should also



dark chaos zine cover, dc-cov1.gif, by carrie mcininch

Cover of Dark Chaos - Zine

be thinking about how to distribute your zine. Here are your choices: Generally speaking, you can divide all the distribution methods into two categories: e-mail and everything else. The advantage of using e-mail is that anyone who can receive mail from the Net can get your zine. For example, many deprived people on the commercial services can receive mail from the Net but have no easy way to read Usenet groups or to access a gopher or a web server. The disadvantage to using e-mail is that you must maintain a mailing list. If you decide to publish a small, controlled circulation zine, you can keep an exclusive list of e-mail addresses and mail each new edition of the zine to everyone on the list. Unless your list grows too large, this will be okay. However, if you plan to make your zine available to anyone, you will find that maintaining even a medium-sized mailing list by hand is more time-consuming than you would guess. If you decide to use e-mail and make your zine available to the public, we suggest that you use some type of mailing list software, such as Listserv, Majordomo or Listproc. The easiest way to use such software is to ask your system manager whether or not your system already has such a facility. If so, ask nicely if you may be allowed to add a mailing list to the collection. If your system does not have such software, you can (if you are nerd) track down and install a mailing list package on your own. However, you will likely find that this is not worth the trouble and that you are better off using one of the alternate methods described below. In any case, we suggest that you do NOT pay a commercial provider for a mailing list service (unless it is inexpensive). If you do, please ensure that your provider will not be siphoning off the e-mail

addresses and using them for commercial purposes. There have been companies of dubious morality who have advertised on the Net that they will set up any mailing list free. Just remember that nothing will cause you to incur the wrath of your readers faster than to be responsible for them receiving unsolicited junk mail. As we mentioned earlier (and as we describe in more detail in the Resources section of this article), many zines are available via ftp, the gopher and the web. The easiest way to distribute your zine is to find an ftp, gopher or web site to carry it. Find the person responsible for maintaining your favorite site and send them mail asking if they will carry your zine. For ftp sites, you will usually see the name of the system manager when you log in. For gopher and web services, look for items that offer information about that particular site.

ADVERTISING YOUR ZINE

After arranging for the distribution for your new zine, you can begin to think about advertising to build up your audience. The first thing to do is to decide whether or not you even want to advertise. Some people want their zines to be small and private. However, if you are like most people, you will want your zine to be as widely read as possible. One good way to attract readers is to post a message to the appropriate Usenet discussion groups or to the relevant forums on your favorite BBS. However, please resist the temptation to start a large, international advertising campaign. The best Zines find their audience through word of mouth. Start small and grow slowly. If you do decide to advertise, be aware that it is considered bad manners to post an announcement to the same group more than once a week. Another good place to advertise your zine is in your .signature and your .plan files. The .signature file contains information (called a sig) that will be appended to the end of each letter that you send out by email, and to each Usenet article that you post. If you use your sig for advertising, please keep it short: no more than four lines for the whole sig. The .plan file is displayed whenever people finger you. It is acceptable to make your .plan file as large and as creative as you wish. For this reason, many people put all the information about their zine in their .plan file and, in their sig, mention the zine and tell people to finger them for

more details. One last idea: If you hang out on IRC and participate in channels devoted to the same topic as your zine, you might want to announce that you have a zine and tell people how to get it. Of course, you should not make such announcements too often or you will just irritate people. One idea is to keep a copy of the current issue of your zine handy and, when someone wants it, to use DCC (direct client to client protocol) to send it to them immediately.

PROFIT IS NOT EVERYTHING OR WHY AMERICA NEEDS COWBOYS

What with the fall of Communism-as-we-know-it and the rise of such contemporary philosophers as Rush Limbaugh, it has become fashionable to assert that — like it or not — our economy and our society thrives when the profit motive is strong. But, the more we study the Internet and the world of zines, the more we reflect that this belief is far too simplistic. True, one can point to socialist states who have bitten the biscuit, or to parts of our government that operate inefficiently, and come to the conclusion that what is best in humanity will flourish only when there is a chance for right-minded people to make money. However, such arguments ignore the miracle of the Net and such enterprises as zines. The contemporary idea that people will not be motivated to excellence unless they stand to make money is just not true. There are many tens of zines available for free on the Net, and each of these zines is created and distributed by people who make no money at all from their efforts. For the most part, each zine serves a small, focussed community that in no way could support a for-profit magazine. What is new about all of this is the Net itself. For the first time in human history, people can create anything they want and then reach out, all over the world, to find those people who are interested in that particular product. The early publishers of printed zines had problems in that it was difficult to distribute their work and to find an audience. Now, the Net affords anyone an opportunity to share their creations with people all over the world. We believe that this is one of the reasons why the Net itself is becoming the largest single influence in the culture of mankind, and that the creation of these first few zines augurs a new global culture based on creativity and sharing. All of which

reminds us of the early days of the American West: the days in which men and women worked hard to open a new frontier and took what they could by the sweat of their brow and by independent efforts to break new ground. True, the stories of the American West contain much myth. However, the image of the cowboy is an enduring one and is an important part of the American tradition. A cowboy is not afraid to blaze an unknown trail or to explore confusing and difficult territories. It has become

far too common for people to depend upon the largess and initiative of others. For example, how many people expect to earn a living by looking for a job in an enterprise that someone else has started? And how many people spend most of their time doing what someone else tells them to do? This is not to say that we can all be captains of industry or creators of new artistic movements. Rather, what we are saying is that for a society to flourish, it needs a certain number of people who will follow

their own vision. And today, we are just as much in need of creative, independent people who will work hard to follow a dream as was America from 1850 to 1890, when the cowboys opened and explored the new frontier. We believe that, amid the mind-numbing influences of late twentieth century mass media and mass culture, we still need cowboys, perhaps more than ever. And today, you will find them on the Net. Zines are just the beginning.

RESOURCES

Zines are distributed via all the standard Net modalities. In order of popularity (with respect to zines) these resources are: ftp, the gopher, the web, Usenet and mailing lists. If you want to see which zines are publicly available, there are two large lists that you can download. The first is maintained by John Labovitz; the second by Heath Bunting. The Labovitz list is available in several ways. First, you can ftp it from rtfm.mit.edu. The directory is: `/pub/usenet/news.answers/writing/zines` the list is long enough to be divided into two files, called part1 and part2. You can also access this list by gopher at The Well. Use the command: `gopher gopher.well.sf.ca.us`

From the main menu, choose the following selections (in this order): Authors, Books, Periodicals, Zines Online Zines Comprehensive List of Ezines Within the Online Zines menu, you can also access many actual zines. An alternate gopher site for this same list is at the University of Michigan. Use the command: `gopher etext.archive.umich.edu`

From the main menu, choose: Zines e-zine-list The Heath list is available via the web.

Point your browser at: <http://www.3W.com/3W/ezines.html> If you start your own zine and you want it publicized, be sure to send each of these people the relevant information so they can add your zine to their lists. The email addresses to which to send information are given at the beginning of the lists. Before we continue with more resources, we would like to digress for a moment to show you some examples of how you can use simple Unix commands to extract useful information from such long lists. For our example, we will use the two-part Labovitz list. When you download this list, you will notice that both parts are in a particular format. After the explanatory text at the beginning, there are a large number of entries, each one describing a single zine. Each entry starts with the name of a zine at the beginning of a line, and each name begins with a capital letter. In addition, under the name, all the information is indented. Thus, you can make a summary of the zine titles by searching all the lines that start with a capital letter. Here is how to do it (using Unix): This particular list is so large as to come in two parts. When you

download these two files they will be named part1 and part2. Save each part to a temporary files. For example: `cp part1 temp1 cp part2 temp2` Now, use vi (or your favorite text editor) to get rid of all the information at the beginning and the end of each of the files, leaving only the zine descriptions. Next, use the cat command to combine the two files into one large master list: `cat temp1 temp2 > zine-list` This new file zine-list contains only zine descriptions and nothing else. You can now use the egrep program to find all the lines that begin with a capital letter. `egrep '[A-Z]' zine-list` more This particular command will pipe the output of egrep to more — a paging program — so you can read the output one screenful at a time. If you want to count the number of zines in the list, pipe the output to wc using the -l (line count) option: `egrep '[A-Z]' zine-list | wc -l` When we did this, we found that the list contained 103 different zines. If you want a keep a list of all the zine titles, you can redirect the output of egrep to a file. For example: `egrep '[A-Z]' zine-list > zine-titles` The file zine-titles now contains all the titles, one per line. When you are finished, you can remove the temporary files: `rm temp1 temp2` You can also remove the original files if you do not want any of the extra information that comes with them: `rm part1 part2` You now have a master list of zine descriptions (zine-list) and a master list of zine titles (zine-titles) with which to impress your friends. The lists that we mentioned will show you where to access the actual zines. In most cases, there is an ftp or gopher site and, sometimes, an e-mail address to which you can send a request. If you want to browse, there are a number of well-maintained places on the Net from which you can download and access zines. Here are the names of two Gopher sites that carry a healthy selection of zines: `etext.archive.umich.edu` from the main menu, choose: Zines gopher.well.sf.ca.us from the main menu, choose: Authors, Books, Periodicals, Zines Online Zines If you know exactly what you want, an ftp site can be a lot faster than a gopher. Here are a few to try: `etext.archive.umich.edu` look in: `/pub/` Zines `ftp.cic.net` look in: `/pub/e-serials/alphabetical` `grind.isca.uiowa.edu` look in: `/info/journals` Note: This last site (the one at U. Iowa) has a collection of zines that are full of information that you are not supposed to know. Aside from gopher and ftp sites, many zines are posted regularly to Usenet newsgroups. The best overall group to read if you are at

all interested in zines is `alt.zines`. Here, you will find announcements about zines, solicitations for submissions, and general discussion about all aspects of creating and distributing a zine. For writing in general, you might want to check out `misc.writing`; and for magazines in general, `rec.mag`. Aside from Usenet discussions, there are two mailing lists that you might find interesting: `zines-l@uriacc.uri.edu` (all about zines) `writers@vm1.nodak.edu` (writing in general) Both of these are Listserv lists. To subscribe, send mail to the user name list-serv, at the specified address. For the body of the message, include a single line containing the word subscribe, followed by the name of the list, followed by your first and last name. To unsubscribe, send a message to the same name and address. The message should contain a single line with the word unsubscribe, followed by the name of the mailing list. For example, if your name is Chuck Wagon and you want to subscribe to the zines-l list, send mail to: `list-serv@uriacc.uri.edu` For the body of the message, use the single line: `subscribe zines-l Chuck Wagon` When you want to send an article to the list, mail it to: `zines-l@uriacc.uri.edu` To unsubscribe, send a message once again to: `list-serv@uriacc.uri.edu` The body of the message should be the single line: `unsubscribe zines-l` As a final resource, we would like to point you to a zine called "Voices from the Net", in which Harley Hahn was interviewed last year. To download this particular issue of the zine (#1.3), use your gopher to connect to the University of Michigan site that we mentioned above: `gopher etext.archive.umich.edu` from the main menu, make the following choices: Zines Voices voices-1.3 In this interview, Harley discusses the importance of the Net to human culture and expands upon some of the basic ideas that we have mentioned in this article.

[Harley Hahn is an internationally recognized author, consultant and analyst. His books include: The Internet Complete Reference, The Internet Yellow Pages and a Student's Guide to UNIX.]

Wendy Murdock is an artist, writer, and Internet veteran specializing in creative art forms including BBSs and MUDs.]

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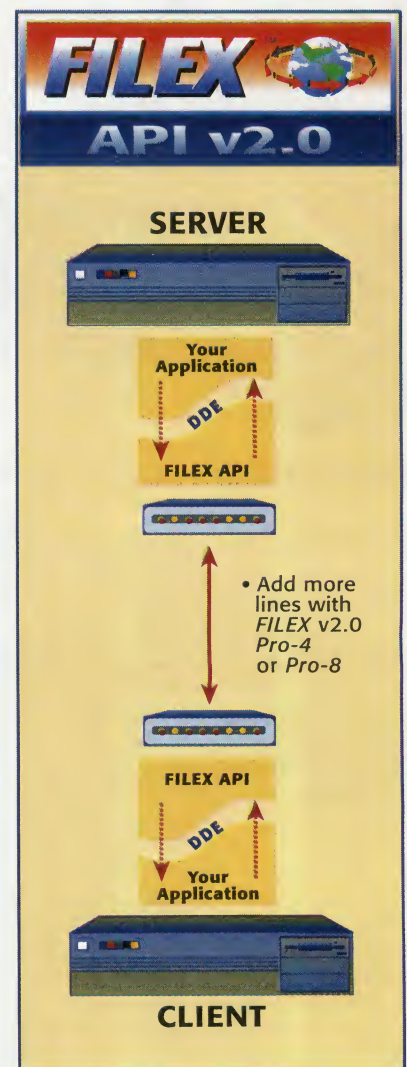
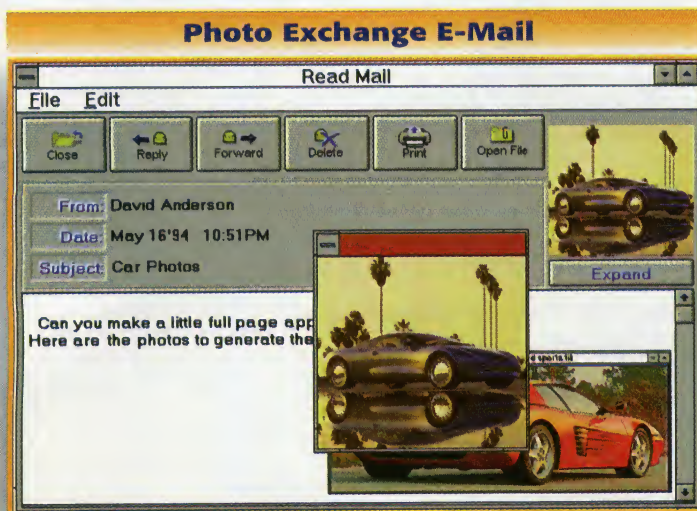


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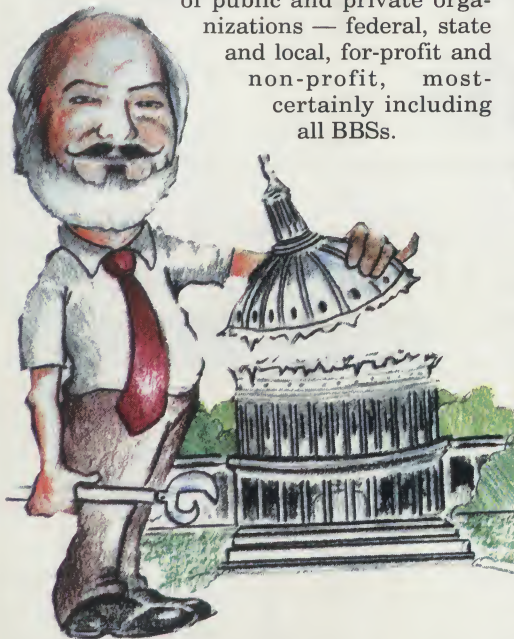
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ACCESS TO GOVERNMENT

DIGITIZED REGIONAL MAPS FOR ALL

by Jim Warren

It's time to create digitized regional base-maps for each of our geographic communities, that can be freely shared and used without limit, by individuals and by an unrestricted range of public and private organizations — federal, state and local, for-profit and non-profit, most-certainly including all BBSs.



SPEAK UP OR LOOSE OUT

It's beginning to happen, and BBS sysops and BBS users better leap into the infant organizational efforts, lest they be shut out — or priced out — of access to and use of such potent computerized community information.

After asking your local public-agency administrators (in Public Works and Planning Departments, etc.) what, if anything, is happening locally along these lines, the initial places to leap-n-shout are (1) brief statements-for-the-naïve during public-comment periods before city council and county board meetings, (2) letters to the editors of local daily and weekly newspapers and teevee stations — which could make use of such shared base-maps, (3) vigorous dialogue with fellow sysops in the area, and (4) heads-up notices to all systems users and online associates.

At this early stage, I have not seen any organized opposition to low-cost or free access or use (beware of per-use fees!).

But it is a "clear and present danger" as eager for-profit private corporations and fee-hungry public agencies begin organizing to create and share such geographic information in digital form. When I asked about pricing and use policies for such public information, at an early-June organizational meeting addressing this topic, the speakers vigorously skidded around my repeated queries with non-responses. Caveat Citizen!

SILICON VALLEY'S BASE-MAP

A plan for creating a shared base-map has been proposed for Silicon Valley at the south end of the San Francisco Bay. Organization is being facilitated by Smart Valley, a non-profit, member-supported coalition of industry and public groups. [Michael McRay, GIS Project Manager, Smart Valley, Inc., 1661 Page Mill Rd. #200, Palo Alto CA 94304-1209; 415-843-2160; michaelm@svi.org]

More tenacious than a gopher [nerd's humor], BADGER is the Bay Area Digital GEoResource, a shared base-map project proposed by Lockheed in a \$3.5-million, 3-year funding request to NASA's HPCC — High Performance Computing and Communications. It's one of about 400 funding proposals submitted for HPCC's Public Use of Earth and Space Science Data Over the Internet project. Although it's only one of 400 loot-seeking missives, it has a potent collection of industry advocates and government contractors behind it, and would seem likely to receive funding. [Dr. Dave L. Milgram, Principal Investigator, BADGER, Lockheed Research Labs, Orgn. 96-10, Bldg. 254-E, 3251 Hanover St., Palo Alto CA 94304-1191; 415-424-2277; milgram@stc.lockheed.com]

Associated with BADGER and also coordinated by Milgram, BASIC is the Bay Area Shared Information Consortium, a start-up effort now under way to organize those who are interested in such shared geographic and other information.

SCC LINC is the Santa Clara County Land Information Network Cooperative, another start-up of organizations seeking to acquire and distribute South Bay GIS information — geographic information system. SCC LINC appears

to be oriented more to public-sector information users, and is coordinating its efforts with those of BASIC and BADGER. [Don C. Wimberly, Special Projects Manager, City of Mountain View, 500 Castro St., Mountain View CA 94039-7540; 415-903-6215.]

WHAT'S A BASE-MAP?

A "base-map" is a map that individuals and organizations can use as a base on which to build or add their own information such as arbitrary drawings, "what-if" sketches, temporary routes, electronic map-pins, site data, neighborhood-association members' homes, customer information, etc. If it's not already included in the base-map, others can add surveyors' benchmark locations, elevation information, fault lines, sewers, drainage paths, utilities, ISDN phone lines, bus stops, vegetation, voters' homes, subdivision maps (existent and proposed/opposed), parcel maps, soil and geological data, etc.

At a minimum, such public, shared base-maps should include the key political-boundary information, e.g., city and county boundaries, census-tract boundaries, etc. These freely-shared base-maps should also certainly include exact state and federal highway traces, and hopefully city and county roadways.

In the case of property subdivision maps, certainly city and county Planning Departments should by now be **requiring** that developers submit their mandated maps in **both** paper form and in some sharable/importable, nonproprietary digital form — side-issues for chat with your local planning director.

Requiring such digital submissions of subdivision maps is essentially the same as the Federal Elections Commission and several states that are now considering requirements that politicians' campaign-finance disclosures be submitted in digital form. Similarly, various court systems are exploring the possibility of requiring case-briefs and other court documents to be filed in computerized form — part of a future "paperless judiciary." Ahhh, but I digress.

Public regional base-maps should also include digitized visual-spectrum satellite shots and/or public-agency aerial photos — periodically-updated as available, because things change — that

overlay or can be overlaid by the shared base-maps. If NASA wants to charge for satellite photos that we've already paid for by tax-bux, then shared-map zealots should comparison-shop with the Russian space agency.

At the same time, they may as well comparison-shop the photo resolution being offered by these competing suppliers. e.g., the initial resolution discussed in the BADGER presentation was one-meter per pixel — and it's well-known that NASA and the Russians have **much** better resolution than that.

And, the publicly-shared satellite photos may as well include images in the non-visual spectrum — infrared, etc. They can better identify vegetation, insect infestation, water resources, whales 50-feet below the surface [another digression], etc.

DOVETAIL DA DATA

One of the more serious potential problems on the horizon is that the folks in one region — perhaps one or several counties or [Louisiana] parishes in size — will decide to create a shared base-map in one format, requiring one set of software tools for its use. Then one or several of the adjacent regions, suffering from acute GIS envy or NIH Syndrome (Not Invented Here), will create all their base-map information in an incompatible format, perhaps one that requires entirely-different software tools.

Thus, it would be difficult or perhaps near-impossible to “marry” the base-maps of adjacent regions to each other. **Stupid!** — but certainly possible between rival bureaucracies and competing corporations-with-clout.

On the other hand, it is equally possible — if not likely — that the first consortium stepping into this contorted quagmire will do it dumb, and then adjacent regions will have to either be incompatible with their neighboring region when they do it better, or else must dumb-down their efforts so as to be compatible with their neighbors' mistakes [sic]. The best way — perhaps the only way — to have your region avoid these pitfalls is to make damned-sure you are involved in the organizational and planning processes from the beginning, at least in those that involve your public agencies, spending your taxes, where you are **supposed** to have a voice.

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One of the major lessons we are learning from other computerized public records of government agencies is the importance of assuring that they are created and maintained in a way that (1) permits straightforward export of (2) all public information in (3) one or more nonproprietary, generic formats, that (4) can be used by more than one vendor's software tools and most-assuredly does **not** require some home-grown proprietary or mainframe software in order for the public to use copies of computerized public records.

Anything less virtually guarantees less access, less utility and greater cost than necessary — for the public **and**, in the long term, for the public agency.

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IT'S GOTTA BE “FREE”

Because such base-maps are useful to almost everyone, and are perhaps of

greatest value to almost-every local, state and federal government agency, their creation should be jointly funded from the General Funds of towns, cities, counties, states and the federal government. As such, everyone's taxes will, appropriately, pay for them.

When everyone pays taxes for creating these base-maps — and NASA photos — copies should be available to anyone for any use, priced at no more than the incremental cost of copying. And if the actual cost of copying (e.g., the cost of downloading a copy from a base-map file-server) exceeds the cost of billing, collection and accounting for the copying fee, then they should be "free" — just like all those other facilities and services for which our taxes are prepaid.

Access to such fundamental geographic information about one's surroundings, in this powerfully-useful digital form — especially from agencies that use public tax funds to create, collect and retain such public information — should not be available only to those who can afford profiteering public-agency fees that far exceed the costs of copying. We tax-payers have already paid for it once.

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Warren [345 Swett Rd., Woodside CA 94062; (415)851-7075; jwarren@well.com] received the first-year Electronic Frontier Foundation Pioneer Award, and more recently the James Madison Freedom-of-Information Award from the Society of Professional Journalists - Northern California for helping to make government information freely available online. He is now pushing for similar access to campaign-finance disclosures. He founded **InfoWorld** and the Computers, Freedom & Privacy conferences, was founding host of PBS' television's "Computer Chronicles" and founding Editor of **Dr. Dobb's Journal**, among other things.

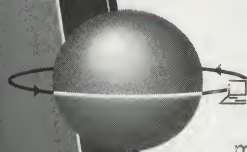
He began working as a programmer in 1968 after ten years teaching mathematics, holds three graduate degrees in computing and mathematics and has taught computing at various universities including Stanford.

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Private user chat	Yes	No	Extra	Yes	Yes
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QWK networking	Yes	Yes	Extra	No	Yes
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Chat between doors	Yes	No	No	Yes	No
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DOS door support	11 types	2 types	2 types	No	No
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Offline/Remote file requests	Yes	No	No	No	No
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EDUCATION LINK

by Bill Gram-Reefer

THE RAIN MODEL

If you're overwhelmed by the possibilities of maximizing the Internet and computer technology and communications for education purposes and don't know how to do it, check this out. Don't be a lone wolf, build relationships, collaborate, invite your friends and colleagues to create a critical mass that can provide the energy and resources you need to make something good (and real) happen.



For instance, the Regional Alliance for Information Networking (RAIN), based in Santa Barbara, California, is a leader in developing self-sustaining regional networks and in providing online resources for educators. An independent, non-profit agency that serves Santa Barbara, San Luis Obispo, and Ventura counties, RAIN provides online resources, conferences, workshops, publications and seminars that further public understanding of, and access to, advanced inter-networking technologies. It sees itself as an off-ramp from the information super-duper highway, providing a variety of far-reaching and challenging activities for students, teachers, and businesses.

In addition to its regional activities (below), RAIN hosts three information exchange vehicles on the Internet that serve users nationwide: the National Community Networking List (COMUNET), a U.S. non-profit list for public service inquiries and recommendations, and the National Information Center for Regional NII On ramp Development (NIC), founded in 1994 to assist regional level networking development plans, and to support local initiatives that provide alternatives to commercial services. The NIC includes a discussion list, and is building a virtual library of information resources and serves as a Gopher and World Wide Web (WWW) gateway.

RAIN's international activity, in association with the National Science Foundation and UNESCO, includes the international development of a Pacific Rim Network bridging education and economic development resources across

the Pacific Basin. The Central Network is planned to be established in Costa Rica, with regional hubs in California, Ecuador, Peru, New Zealand, Australia, South East Asia, China, Japan, Canada, and Hawaii. Services to governments include a County Tax Information BBS, a multiple county Law Library, a City Public Information Service, County Council, access to City Attorney and Superior Court Resources, a bi-lingual City Council BBS, and a Regional development center. Additionally, serving statewide interests, RAIN operates the Cal Net discussion list, while a new archive project hopes to pull together National and California League of Cities resources.

In addition to its education resources, RAIN works with students on a variety of special projects, publishes the Kids News Net, a student newspaper published electronically on the Internet, and sponsors a two-month summer camp, Camp Internet. Library services include the development of an electronic library and virtual reference center, and its T-1 line provides host access for the Tri-County Black Gold Library Cooperative, the Westmont College Library, and is affiliated with the T.I.E. Library Cooperative. RAIN also provides Internet services and legal resources training for Central Southern California Law Libraries, and is collaborating with other groups to develop an online professional network to serve most of Southern California.

RAIN also serves as an on-ramp for individual network subscribers who are a welcome part of RAIN's electronic mix of users. It provides full Internet access for personal use for \$10/month (\$15 for families). Users can take advantage of e-mail, telnet, FTP, Gopher, WWW, Lynx, Archie, Veronica, Usenet discussion groups, and IRC services. National access is available for \$4/hr.

Its conferences include the annual June conference on building the virtual classroom and workplace, which emphasizes applications for advanced networking technologies that exist now in offices and classrooms. Teachers learn to use computer networking to access global resources that include international education projects and remote space exploration through virtual reality telepresence technologies. The virtual office track is geared for executives and managers interested in improving the work environment with creative and flexible non-geographic offices that can meet corporate and customer needs via a remote connection.

RAIN has also formed an alliance with several educational institutions in its regional area to coordinate two important education programs: The Pacific Rim Science Education Center, and the Global Mathematics Gateway Program. The RAIN Virtual Classroom Partnership includes: the Remote Access Astronomy Project, the South Coast Mathematics Partnership, Tri-County and South Coast Science Projects, a Western Commercial Space Center, The Space Shuttle Get-away, and Western Space Museum and Science Center, and many other projects. The programs include teacher training, summer session workshops, participation in VR, curriculum delivery, mid-winter retreats, and the annual conference described above.

RAIN's members include over 25 colleges, universities, county and city governments, school districts, museums, and institutes. Corporate sponsors include Sun Microsystems, Rockwell, U.S. Robotics, Telebit, Wells Fargo Bank, Red Lion Resorts, to name just a few, and manufacturers working with RAIN include ResNova, Cisco Systems, Livingston, and Apple Computer. While RAIN provides an impressive menu of services and programs, it is most important, right now, as a model for other regions around this country and the world.

The regional network concept with a foundation in a wide-scope educational mission, as demonstrated by RAIN, coupled with successful collaboration with surrounding institutions, government agencies, and corporate sponsors is the best model I've seen so far that provides the scalability and the resources needed to create a sustainable and expandable infrastructure that makes room for all the other public community services touted by those who would try to build the model from unsustainable community-based nets. In fact, if we just voted this November to dismantle every State Board of Education and replace them with regional-based organizations like RAIN, there would be no stopping the revolution.

RAIN Network, Timothy Tydall, Network Director, P.O. Box 2683 Santa Barbara, CA 93120; (805) 899-8610 voice; (805) 568-2299 fax; rain@rain.org internet.

Bill Gram-Reefer, based in Concord, CA, is president of WORLDVIEW, specializing in connectivity and communications. E-mail Bill at: reefer@netcom.com

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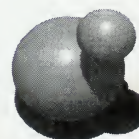
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by Bill Gram-Reefer

PUBLIC ADDRESS AGAIN

The computer industry press throws so much bull at its subscribers that some times it's just too hard to keep up with it all, or know when things have changed and how quickly. Two cases in point:

Eric Hoffman, manager of the Computer Store at the University of Chicago wrote a nice letter recently, "Dear Bill, I just ad your Mac section in the June edition of Boardwatch. In question three of "Stump the Chump," Suchit Nanda inquires about Offline mail readers for the Mac. I've uploaded the last three versions of "Alice" to both the umich Mac archive and sumex-aim. Alice is now at v2.4b2. This version adds support for the popular "BlueWave" format, simplifies the configuration of a Macintosh Point setup when using the freeware FidoNet mailer "Charon", and retains the ability to handle .XRS and .QWK packets as well. Aside for needing a more current manual, Alice does a nice job of connecting Macs to Fido systems for \$15. I tried to mail Suchit a uuen-coded attachment containing the latest version of Alice but had no luck reaching his site.

"I have an idea for an article which I would like to see you write. There is a newcomer to the field of Mac BBS contenders - "Public Address". Public Address is reminiscent of Hermes but

is notable in that it currently supports connections over the Internet and, for a meager \$80, the author will give you source code as well as additional example modules with which you can roll your own enhancements. Colen Garoutte-Carson is the author of Public Address. Colen currently provides tech support for Symantec's programming language products (boy, must he be busy!).

"In answer [to] Jack Rickard's reply to a reader: Yes, I'm sure you could take a PowerBook (not the 100!) equipped with MacTCP and a copy of Public Address and turn your setup into an Internet accessible BBS!

"Obtaining Public Address can prove to be difficult: either you must call a handful of PA boards, or you must use gopher to connect to ccsgopher.uchicago.edu, or ftp to reach capstan.cis.yale.edu. PA boards that I know of include Colen's - 503-485-7781, and a board in Xenia, Ohio - 513-376-1287. There are currently a few PA bulletin board systems up on the Internet. You may wish to contact Milo Sharp at FXMCS@ACAD3.ALASKA.EDU for more information on his board. Milo has, within the space of about two weeks, set up a PA board on the net, written his own custom module which allows you to finger online users, and drawn up a good description of what PA has to offer for James Barry's "Mac BBS FAQ."

Even though I run a GUI based board, I am impressed with the clean layout, modularity, and performance of Public Address. Given the bad feelings evidenced towards Hermes on the part of some Hermes developers and sysops in comp.sys.mac.comm and the low price of Public Address, I would expect to see more BBS sysops opt for PA in the near future. In any case, I hope you have the chance to look into Public Address in a future column."

Eric Continues, "Here is an excerpt from Milo's description of Public Address: 'Public Address is a new modular bulletin board system, currently being authored by Colen Garoutte-Carson. It is in late beta stages, the most recent version being 0.9b9 rev A. The basic setup is reminiscent in some ways of both Hermes and Hermes' obvious antecedent, WWIV. However, Public Address supports some features Hermes lacks.

"The most obvious new feature is integrated TCP/IP support. Public Address (often referred to simply as PA) offers you the choice of serial port connections (through the modem or printer port, or any CommToolBox-registered port), ADSP connections, or TCP/IP socket connections. Each are easily added, work flawlessly, and can be customized with automatic opening and closing times. PA v0.9b9 rev A comes with only telnet support, but the author has made plans to add other common TCP/IP protocols, such as SMTP, FTP, and NNTP. Version 0.9b10 (due out in a few short days from this writing) will also include modules to allow users to telnet out from a PA site, and also to dial out using any spare modem lines.

"Another important aspect of Public Address is its modularity, which makes it easy to customize or enhance your bulletin board. Each function of the BBS itself is a separate module, which can be linked or unlinked with your system as you desire. You can also create chains, which execute several different modules sequentially. While PA comes with a standard suite of modules, including messaging, email, and transfers, it's a simple job to write your own, if you are familiar with Pascal, C, or C++. The author also makes available documentation and module skeletons for sysops to add their own feature.

"Modules can take advantage of the network links in PA by using IMC - Inter Module Communications. IMC allows modules to call each other, transmit information between the two, and maintain network links, which allows module programmers to easily create multi-user modules, whether they're games, chatting modules, or networked file transfer modules.

"For the future, Garoutte-Carson has a GUI implementation planned, as the foundation is already laid in PA. In fact, the Public Address program itself, sans all the modules, is a very nice terminal program, with support for TCP, ADSP, and serial connections; X, Y, and ZMODEM transfers; and both TTY and ANSI (16-color) emulation. Sysops have two methods of doling out access: either by a security level, which can range anywhere from 1 - 1000, or by 42 different 'flags,' each of which can be named and assigned to users independently of the others. This allows sysops a wide range of privi-

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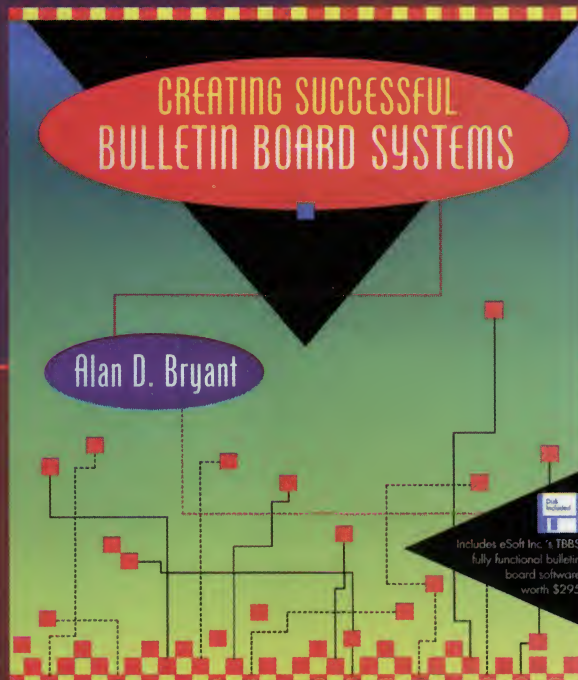
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Alan D. Bryant is Director of Marketing for eSoft, Inc., and is a contributor to **Boardwatch Magazine**. He is the owner of Bryant Software and is a software developer for BBS add-on utilities and entertainment products.



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leges, and also provides for an easy way to lock individual users out of certain features."

My response to Eric is thanks for the info about the new rev of Alice and for all your efforts to get the program to India. As for Public Address, please refer to the October 1992 (!) edition of Boardwatch where this column previewed Public Address and highlighted the background of its origins and authors.

Let's see, this is the summer of 1994, and from your letter and comments I've seen working their way across the mac-based news groups, it appears that Public Address is, indeed, finally emerging from a state of development into a beta or almost alpha stage. If I'm wrong, the authors are welcome to correct my ignorance at the e-mail address below. So, after almost two years, no one can accuse this writer of refusing to write about vaporware within these august pages (no pun intended).

Milo's point about the modularity of Public Address is well taken, and is implemented to some large degree by Spider Island Software's TeleFinder, as well, in that the node manager, user manager, caller log are actually separate programs working in tandem and make for easier updates and additions of more nodes rather than re-writing the entire package in between major updates. Also ResNova, in the way it supports "externals,"—a curious term from the DOS side of BBSing, I suspect—speaks to these design concerns as well. As for the support of TCP/IP, the effort of PA is laudable, for, after all, AOCE is the future on the Apple platform, isn't it?

But, I'm wondering how Colen et. al. will address the issue when they finally get their GUI act together and iron out the inner workings of the client-side. For instance, in last month's column, I surveyed FirstClass, ResNova, and Spider Island in their progress toward building a host that can support internet connectivity, and not just ASCII telnet but full GUI. It appears that it is better (please hum the standard "ease-of-use" mantra) to have the user (client) have that interface built-in in some way, so it's not a separate piece that has to be installed, configured and reset, situations providing ample opportunity for users to get lost and turn-off. So we'll see.

As it stands, the ResNova implementation is the most complete on the client side of a GUI where you select Mac TCP as the connection method. With Spider Island, you use a version of its NetConnect tweaked for TCP. As such, NetConnect is still a separate piece and

Spider Island promises to have it integrated into the client and available in its TeleFinder Pro shareware terminal emulation package as well, probably by the time you read this. As for SoftArc, the VersaTerm TCP tool is used and configured for use with the FirstClass client. Representatives from SoftArc admit this is not ideal and are working on their own integration scheme.

Finally, as Jack's ignorance concerning the capabilities of any Apple product is the stuff of legend, yes there are now at least four ways to run an Internet-connected BBS off a portable Mac, NovaLink, TeleFinder, FirstClass, and another hearty welcome to Public Address.

PA boards Eric Hoffman knows of include Colen's (503) 485-7781, and a board in Xenia, Ohio (513) 376-1287. There are currently a few PA bulletin board systems up on the Internet. You may wish to contact Milo Sharp at FXMCS@ACAD3.ALASKA.EDU for more information on his board. ResNova Software, 5011 Argosy Drive #13, Huntington Beach, CA 92649; (714) 379-9000 (voice); (714) 379-9014 (fax); (714) 379-9004 or resnova.com (Nova Central BBS). Spider Island Software, 4790 Irvine Boulevard, #105-347, Irvine, CA 92720; (714) 669-9260 (voice); (714) 669-1383 (fax); (714) 730-5785 or spiderisland.com (BBS). SoftArc Inc., 805 Middlefield Road, Suite 102, Scarborough, Ontario Canada M1V-2T9; (416) 299-4723 (voice); (416) 754-1856 (fax); (714) 609-2250 (FirstClass BBS). Synergy Software, 2457 Perkiomen Avenue, Reading, PA 19606; (215) 779-0522 (voice); (215) 370-0548 (fax); maxwell@sales.synergy.com (internet).

AEOLUS UPDATE

Then, in the March 94 issue, this space covered the debut of Aeolus, a mail tosser for Macintosh published by Delphic Software. At the time, this was a welcome announcement coming on the heels of the demise of Tabby in November 1993. Well, what do you know, but Delphic has come up with the Aeolus Pro series, a group of customized versions of Aeolus that interface directly with the host BBS module! Special versions of Aeolus are preset and packaged for various Mac BBS systems and setups. First to see the light of day will be Aeolus Pro/HII, a Hermes II external with complete setup capabilities from an external; Aeolus Pro/FC, a FirstClass gateway application with **FREQ**'ing and Crashmail capabilities from a Database Extension; and Aeolus Pro/SS, a single program that runs in an event chain and imports/exports directly to/from the Second Sight message files. For this version, according to Mike Marshburn, president of Aeolus, an online setup

configuration utility is planned, but will not be released with the first version.

According to Marshburn, "Aeolus Pro/HII is a "Hermes II External" that does all of the FidoNet mail processing, and calls F1 and ZipIt by AppleEvents. No more mysterious Tabby files, no more hidden configuration options, all of it is accessible from the Aeolus Setup interface! Furthermore, for BBS systems with an external capabilities, the Sysop can reconfigure the entire system from online! Essentially, we have put the entire Aeolus Setup interface online for access from an external on any and all BBS systems that support externals! We have excluded absolutely no one in our development efforts and will have a version of Aeolus Pro released that is customized for each Mac BBS system!

"Perhaps the biggest new feature in Aeolus Pro is the HFNs(tm) FidoNet standard created by Massimo Senna (creator of Formula 1—ed.) and myself. The Hierarchical FidoNet Standard is a revolutionary new way of handling FidoNet mail that destroys all remnants of the Tabby way of handling files. Furthermore, HFNs increases reliability by ensuring that packets are never lost, mail always gets to the other node, and ensures that Aeolus Pro can toss the mail as soon as it has been transferred! Plus, Aeolus Pro does direct packet-to-BBS importing of messages, where MacKenna! must first put the messages into an RFC-822 or Generic file before transfer to the BBS."

Pricing for Aeolus Pro is the same as for the previous package \$65, with a \$15 upgrade/trade-in rebate from any Macintosh mailer/tosser system, including Tabby and MacKenna! (any version). Some of the standard features include: unlimited number of routes, events, areas, and points; fast mail tossing; an easy-to-use setup utility with help balloons and friendly dialog boxes; complete manual that covers all aspects of FidoNet, the process of setting up the Formula1(required) mailer, ZipIt(tm), and Aeolus; support for Host-Routing, Routed NetMail, and NetMail Masking; conversion of an entire Tabby setup over to Aeolus; built-in area management (like AreaFix/Trix) via AreaMan; an unlimited number of origin lines can be defined, with one randomly chosen for every outgoing message; rapid processing of all files thanks to the Delphic Software B-SLAM(tm) and HS/BFA(tm) technologies; plus lots more, like the ability to process messages while the BBS is running.

Upgrades to Aeolus Pro are FREE for all owners of Aeolus v1.x. If you want to be ready for the newest wave of Macintosh FidoNet mail processing, consider

Aeolus Pro.Delphic Software, ATTN: Aeolus, PO Box 7604, Redlands, CA 92375-0604; Delphic Software (909)792-4902 FirstClass BBS; Delphic_Software@delphic.com Internet; Delphic Sw AOL; Delphic Sw eWorld.

USING e WORLD

by Bill Gram-Reefer

O.K., so let's get the obvious comparison out of the way: for about a second you think you actually were able to log onto AOL. That out of the way, e.World, Apple's new online service for Macintosh users, provides more zip and panache with a rich and interesting sense of place, and, according to one analyst, works better on a big screen than AOL.

Being a new service, there are lots of places to explore: eMail Center, Business and Finance Plaza, Info Booth, Computer Center, Arts & Leisure Pavilion, Community Center, Newsstand, and Learning Center. You'll find it real easy to browse, which speaks of the navigability the AOS group built into the system. Yet, as e.World has only recently launched after a wide beta program, there are many areas still under construction or just coming online. So it will be fun to be there at the start and watch it evolve and see how users interact with the system. Writing this first column in April, prior to the launch, there were still many areas under construction and announcements for the July time frame concerning upcoming events that you readers might want to know about were nonexistent. So for lack of "news" and a two month lead time, I plan to explore e.World and write about it from a users' standpoint, highlighting its different

sections, how to use them and noting any special or new areas as they come online.



Imagine a world that
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e.World

One of the more useful places you'll find in e.World, and one you'll check into regularly is the eMail Center. Providing more than the bare essentials, e.World's eMail center presents a simple and easy-to-use interface and functionality that you shouldn't have any problems with. Here there are clickable folders that contain your read and unread mail, mail you've saved. One of the interesting features of e.World is that if while rummaging through some other area of the service you decide to select a file for downloading, you have the option of post-

poning the download until a later time so you can rummage some more before being interrupted by the transfer. You can keep track of these files in another folder called "Files to Get." In this window you'll also find folders containing outbound mail and mail already sent during that session. Of course, the real solution to this is to provide bi-directional signaling so that users can get on with other business while a file transfer is taking place. We'll see.

The eMail Center also lets you create mail, maintain an address book, and schedule events. By clicking on Compose Message you'll get a window denoting address, subject and body. You can click on the address book or member directory to find a user's e.World address. You can also attach a file to the message, so have at it. Interestingly, you can post messages to users across the Internet by simply entering the name@service.whatever. That's it for Internet access, really. Unlike AOL, which now provides several services including Usenet groups, Gopher, and WAIS, e.World only provides mail. Special features still under construction at press time were the fax and postal capabilities that would send your mail in either fax or some snail-mail fashion at an additional price yet to be determined.

Finally, the Automatic Courier is the closest thing you'll find that resembles CompuServe's Navigator, a program that automates sessions on that service. With Automatic Courier you



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can schedule the time(s) when the e.World client will automatically launch, log onto the service and get and send mail or send or retrieve files. Unfortunately, this capability only extends to mail and files, so there's no way to also retrieve any content from the conference postings, or items from the Newsstand, for instance. Nor does it provide info on new files, perform searches or any of the other cool stuff Navigator does. Something of a help I suppose, but you have to have actually been there to select a particular file for downloading in the first place. Fortunately, you can compose and read mail, edit your address book and schedule the Automatic Courier offline, so if you only use e.World for mail, the automatic sessions can save money.

Another area that helps you in this regard is the Membership menu that gives you access to the Membership Directory and provides the ability to "look up" a colleague if they are online. You can also use this menu to set various preferences. For instance you can configure e.World to automatically decompress files and throw away the stuffed file after you log off (default). This is a nice touch and one that shows off the Apple Events awareness of an eMail program designed by Apple itself. Other prefs you can toggle and adjust what kinds of fonts and sounds you'll see and hear, when and where.

Bill Gram-Reefer, based in Concord, CA, is president of WORLDVIEW, specializing in connectivity and communications. Bill has been writing about Macintosh computers since 1984. Email Bill at: reefer@netcom.com

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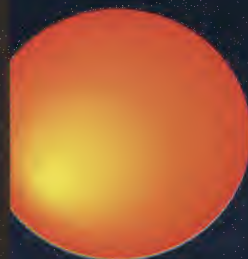
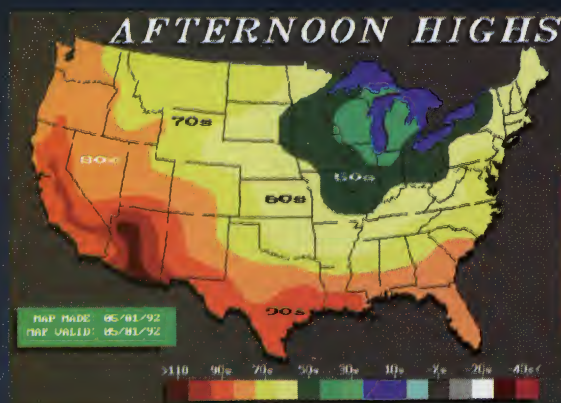
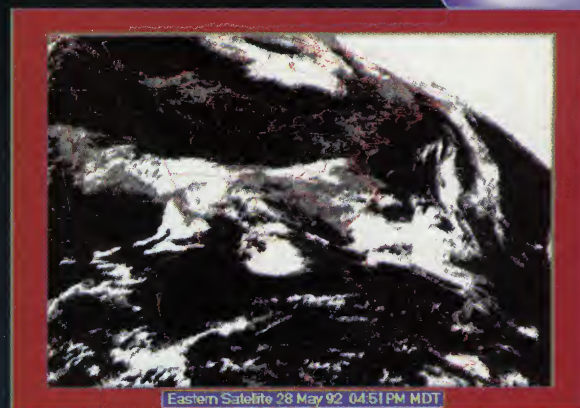
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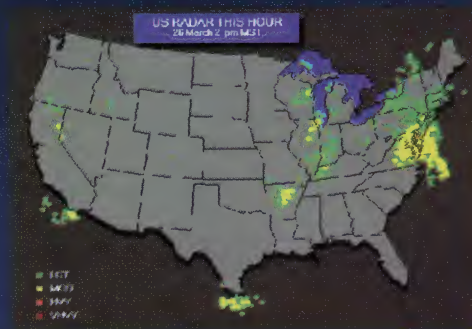
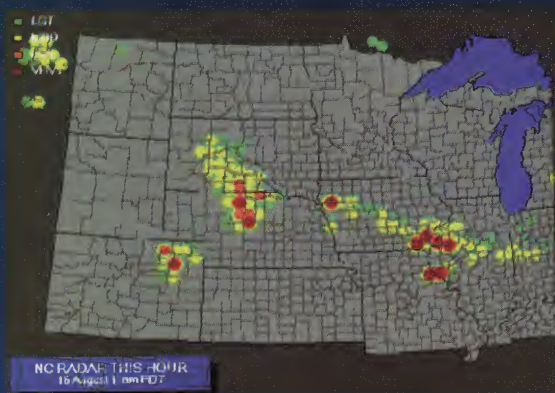
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SHOOTOUT: SOFTWARE RATINGS AND THE STRUGGLE FOR INDUSTRY DOMINANCE

by Lance Rose

Within a few months we will be treated to sex, violence and profanity ratings on computer software. Those who witnessed ratings regimes develop for comic books, films or pop music in the past shouldn't be surprised. This ritual is acted out with every new medium favored by our teens and pre-teens, helplessly attracted to consumer products featuring violence and, at a slightly more advanced age, sex.

Computer games went way cool with this crowd a year or two ago, when they finally achieved convincing visuals, sounds and 3D action. We have been treated to a parade of computer games featuring dismemberments, strip tease babes, and people and animals gunned down everywhere in bright red splashes of blood. If there's profit in showing a beaten enemy's head lifted off his body with the spine still attached and dangling, then there's a bunch of companies working on depicting the most gruesomely realistic dangling spine. There are many, myself included, who couldn't care less about the influx of hardcore games. Everyone should be able to choose their own poison.

There are others who see differently. Wherever youngsters frolic wildly with a new medium, the guardians of our moral fiber are not far behind, seeking as always to shut down the party. They come armed with a well-worn, but never proven theory: that sex and violence in entertainment media cause kids to go out and commit depraved acts of — you guessed it — sex and violence. This unproven theory gains popular force with every news report of a senseless killing where teenage kids chant words from a heavy metal song while beating their friend, or a young suicide who is also known to be a Dungeons and Dragons addict.

Once the masses are whipped into a moralistic frenzy, something must be done to contain the excesses teens

crave, or else the industry in question will suffer a hellacious legal clampdown. This is where the computer game business is at today. The moralists are damning computer games as Satan's latest twisted digital temptation for the hearts and minds of America's young.

To make America bend to their will, a laughably easy task for maniacally narrow-minded interest groups, they enlisted Representative Jack Lantos to sponsor a game ratings bill, H.R. 3785, currently pending in the Committee on Energy and Commerce and the Judiciary. No smart politician this side of retirement will oppose the bill. Most government efforts to regulate or rate entertainment media contradict the First Amendment protection of free speech, but we preserve this freedom by throwing a bone to the restrictive moralizing types every now and then. This year's bone is computer game ratings.

The next move in the ritual rating game is for industry to self-regulate to avoid government regulation. Software makers are now organizing to do just that. As of this writing, at least two different self-rating regimes have been prominently advanced by major software industry trade groups. It turns out, though, that there is anything but a community of interests among the game makers. On a closer look, the computer games rating affair is rife with strange trends and agendas. The real issues at stake have very little to do with whether Johnny should get his rocks off in front of a computer. For context, we need to consider the other major factors setting the stage for computer game regulation. There's more behind it than simply the appearance of a few gruesome and racy titles. For one thing, computer games became a really, really big business while few of us were looking. Several months ago, a fascinating news tidbit made the rounds: the computer game business, including console videogames, grossed more money worldwide in 1993 than the entire Hollywood film industry. This milestone was not lost on film makers, who had already immersed themselves in all kinds of secretive multimedia projects five years ago or more, and are fully committed to an "interactive" future. For many in Hollywood, interactivity has arrived and it looks like a videogame. That's where the entertainment money is increas-



ingly flowing, retooling our feature film production machinery for game development. Recent demos of games in progress are shockingly slick, a dazzling merger of modern Hollywood production values with the latest trends in computer action games. Videogame and computer companies like Electronic Arts, Philips (makers of CD-I machines and software) and Crystal Dynamics are leading the way at the moment, but we are also seeing major involvement from film industry mainstays like Steven Spielberg, who recently announced a major investment in software company Knowledge Adventure.

Where the film industry goes, film ratings easily follow. No one is talking about broadening the existing film rating system to cover software, but the film industry and the public have become pretty comfortable with a moralistic rating regime. If Hollywood's new romance with computer games also becomes subjected to a rating system, it's nothing they haven't already factored completely into their way of doing business. Similarly, the public is entirely used to ratings on its Hollywood product, and should barely raise an eyebrow if ratings show up on the interactive and home computer versions. In fact, if the new computerized Hollywood products are not rated, some outraged parent or preacher will scream bloody murder about how the film industry is dodging regulation under cover of new entertainment technologies. They'll get the new stuff covered by a ratings system in no time.

The only players not already comfortable with an industry rating system are the software companies. Which brings us to the other main factor leading to

computer game regulation: computer companies have been remarkably free of industry regulation up to now. Many of the traditional factors leading to industry regulation have been absent or relatively subdued to this point. Unlike the telephone and cable television businesses, the computer industry is not rife with monopolies (the occasional IBM or Microsoft notwithstanding), so there is no need for regulations protecting the public from overpricing, access restrictions and other monopolist excesses.

Unlike the dishonest and incompetent S&L industry, there has been no need for a major bailout of the computer industry, so there is likewise no need for regulations helping the industry change its own diapers. And unlike the securities and commodities industries, the computer industry has no known history of systematic and widespread fraud on the public, requiring a continuous regulatory watchdog keeping the players honest.

Regulation is now on the menu for the computer industry, though, due to the so-called "convergence" of the computer industry with the telephone, cable, print publishing, film, television, and other information industries. Computer products are increasingly being delivered through channels previously reserved for those other industries, and vice versa. Multimedia products appeal to markets cutting across industry lines, and companies from all these industries are merging or joining into all kinds of alliances.

Existing regulators like the FCC have historically latched onto each industry as it became involved in some form with broadcasting, and today rule not only the telephone industry, but also the cable television and parts of the telephone industry. Now that computer companies and their products are becoming more entwined in the activities of traditionally regulated companies, regulators are happy to bring the resulting hybrids and new businesses within their kindly paternal oversight. So regulation fever is running high in the world of computer software, games in particular, and there really is no turning back. This is where the real fun begins.

It turns out that not all producers of computer games are dead set against regulation. In particular, some of the larger videogame companies seem to be actively exploiting the game ratings movement, to pursue an entirely

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different business goal: suppressing their competitors in the computer game business. The trade group in question is called the Interactive Digital Software Association, or IDSA. It is composed of 12 companies: Acclaim, Atari, Capcom, Crystal Dynamics, Electronic Arts, Konami, Nintendo, Phillips, Sega, Sony, Viacom, and Virgin. Together, these companies represent many billions of dollars of annual revenues in the home entertainment business, and especially the cartridge videogame business.

Among this select group of mammoth companies, Nintendo and Sega are the kings of the hill when it comes to computer games. They develop and manufacture the most hugely popular videogame players, and license most of the cartridges produced for those players by many of the other companies. This industry-dominating approach was used by Nintendo when it rebuilt the home videogame market after the collapse of the Atari-led videogame industry in the early eighties, and was aped several years later by its main competitor Sega (maker of the host machine for Sonic the Hedgehog). It involves controlling both hardware and software, and aggressively using patent,

copyright and trademark lawsuits to drag down any company that dares to make compatible videogame cartridges without buying a license from the hardware maker. Nintendo and Sega may not win every single lawsuit, but they win more than enough to call the shots in the home videogame business. The hegemony of the Japanese giants in the cartridge business is nearly complete, but watch out! Here comes the PC-based computer game business. Games running on home computers have been a toy industry up to now, limited mostly to running on the Amiga, Atari and Macintosh platforms, the only ones with decent sound and graphics processors. A pretty small market, all told. But in the past year, IBM-compatible PCs have been fitted out with their own inexpensive and powerful, if somewhat temperamental, sight and sound capabilities and high storage capacity CD-ROM drives. Home multimedia PCs and multimedia upgrade kits are selling like hot cakes. Sales of computer games for PCs are likewise taking off. All this is pretty painful for Nintendo and Sega.

The growth of PC computer games spells a hard upper limit on the growth of cartridge videogames. Families often need to choose where to spend their

computer entertainment dollars. Will they invest in a machine that helps Junior with her homework and minds the family's finances along with running a few games, or a device whose crowning achievement is bringing Super Mario Brothers into the living room? Worse by far is the fact that Nintendo and Sega have zero influence in the PC business, a complete flip from their dominating rule of the cartridge videogame business. For the cartridge videogame companies, the software ratings agenda is sent from heaven: an industry-wide regulatory regime that all companies must follow, or perish. It's like the good old days of Nintendo all over again. Except this time, it can be used to dominate not only the cartridge videogame market, but the entire home computer industry. The only catch is that before software ratings can become a vehicle for industry dominance, it must be controlled. This must have been easy as pie for Nintendo and its IDSA cronies, for they had control of both the legislative process and the industry self-regulation effort even as the potential rating legislation was announced. How they achieved control, whether through campaign contributions or otherwise, has not been laid bare to the public at this point, but the fact of their dominance is unquestionable.

Representative Lantos, sponsor of the ratings bill, and other Congress folks are firmly in their pocket. So firmly, in fact, that they are actively assisting the IDSA in its campaign to use software ratings to subordinate and exclude non-IDSA computer game companies. The main evidence for this is an astounding letter that, according to sources, was sent to several major software and toy retailers in this country by Senator Herb Kohl, chairman of the Subcommittee on Juvenile Justice, and Senator Joseph Lieberman, chairman of the Subcommittee on Regulation and Government Information.

We have a copy of one of these letters, sent on U.S. Senate letterhead to Kaybee Toy Stores. It warns the retailer that legislation is pending, and commends IDSA for proposing an "independent" ratings system. It goes on to criticize a competing ratings system proposed by the Software Publishers Association (SPA), ostensibly because the SPA is advocating self-rating by software publishers instead of ratings by an independent board. Finally, it asks the retailer to commit, in advance, to carry only software titles rated by an independent panel (ie, rated by the

IDSA). The Senators suggest that without such a commitment, government regulation may result.

If this amazing letter was sent by the IDSA itself, it could be the centerpiece of an antitrust suit against the IDSA for restraint of trade in the form of a group boycott by retailers against a group of software producers. It is a stark power lunge by a handful of powerful home entertainment companies, the members of IDSA, against a group of competing PC software companies, the members of the SPA.

While technically worded to make it arguably defensible as promoting the independent regulation approach over self-rating schemes without choosing sides between companies, the ruse is paper-thin. Given the way the industry has aligned, the Senatorial letter functions purely as an



endorsement of the IDSA over the SPA. Ironically, it is also a U.S. Congressional endorsement of a Japanese-led industry group over a group predominated by U.S. companies. What's unclear is whether using IDSA's engagement of Senators as middlemen insulates this bold little letter from being a gross violation of the law.

Rep. Lantos is doing his bit to assist the IDSA as well. When a representative of four organizations of smaller software producers (the Association of Shareware Professionals (ASP), the Association of Shareware Authors and Distributors (ASAD), Shareware Trade Association and Resources (STAR) and Educational Software Cooperative (ESC)) contacted his office to discuss the ratings bill he was sponsoring, she was directed

instead to the IDSA, as if they were in charge of the legislation. Okay, so now she approached the IDSA. There, she was told that if she, and the four organizations she represented, wanted to become involved in IDSA deliberations, she would have to buy a membership for a cool **\$25,000**. Otherwise, the little companies could not play. Unfortunately, the groups she represents can't readily pony up 25 G. It would not make much of a difference even if they could. The smaller companies would not exactly show up with a majority voice in IDSA affairs.

What is this independent rating system the IDSA has its senators crowing about? The details are not announced yet, but certain salient features are known. One is that the planned rating fee is at least **\$500** per game, plus a requirement of submitting a slickly produced video of the game for submission to the ratings panel. This is not much for big companies, but smaller producers, especially in shareware, could find these costs a significant barrier to bringing their products to market. Indeed, it could be a big blow to the entire BBS distribution system for computer games, which depends so heavily on games distributed at little or no cost by user uploads and downloads. Another is that the ratings process would require advance submission of all games. This means software producers would have to show the ratings panel, with members connected to some of their competitors, their cutting edge game and marketing concepts before they hit the market. That kind of risk, in an industry where the entire product cycle for a typical computer game is only a few months, requires a huge amount of trust in the ratings organization. Unfortunately, given the IDSA's beginnings, it looks like the only ones who can trust it are those who control it, namely its Japanese founders and their captive licensees.

The vast majority of computer game producers would be left out. The IDSA system would attempt to judge the overall acceptability of the game to prospective purchasers, rather than simply telling them roughly what is in the game and letting them decide on acceptability themselves. Finally, the IDSA ratings would be set by a gang of professional game raters, in proceedings secret from the public.

Despite the impressive attempt by the IDSA juggernaut to smother all competition with his year's version of Nintendo-Sega world domination, the stakes are too big. The PC-platform software companies are fighting back, hard. An unprecedented alliance, the Computer Game Ratings Working Group, was recently formed between the SPA, ASP, ASAD, STAR and ESC. While the collective economic might of the Working Group companies in the games business may still not quite rival the big 12 of the IDSA, the Working Group does represent a lot more producers. If nothing else, it can at least move the fight closer to the proverbial level playing field. As the biggest operator of the bunch, the SPA seems to be taking the lead within the Working Group. The main thrust of the Working Group is to keep the impending ratings system, if have one we must, from turning into a farcical facade for a takeover of the home computer market by the cartridge videogame makers. In particular, they want to keep ratings out of the hands of any so-called independent ratings board that might be co-opted by special interests and bogged down in bureaucracy. They are working on a self-labelling

system that would be implemented in software. Each game producer would answer a series of questions, and the software would spit out the appropriate informative label. The labels would be content-based (e.g. "This software has several scenes of extreme violence and some light nudity"), rather than the judgmental approach pursued by the IDSA (which might result in labels like "This software is not acceptable for children under 13").

The only apparent weak point of this system, if it is to be dependable, is its reliance on federal and state truth in advertising laws to keep dishonest software producers from mislabeling their products. This could be easily fixed, though, by setting up internal industry self-disciplinary procedures designed to make it easy for consumers misled by inaccurate labeling to bring their grievances against errant software producers to the industry group, without having to start up a whole lawsuit. Who will win, the would-be oligarchy kings of computer home entertainment, aka the IDSA, or the surging mass of smaller independents comprising the Working Group? It's a toss-up right now. Any readers who want to help influence this

war can do so by writing the Congress people mentioned above and their own Congress people, and encouraging any educational organizations of which they are part to take an activist stance. And which side should we take? The independent ratings board approach certainly looks attractive in principle, but given the history of the IDSA agenda, it would be foolish to believe any board they would set up would be truly independent. There is also the matter of the cost of ratings to game producers, which could knock a lot of smaller game makers out of the business, and stifle the entire BBS distribution of games. From this corner, the relative anarchy of the Working Group approach looks a far better bet to assure vigorous and free ongoing development of children's software in this country.

[Lance Rose is an attorney and writer practicing high-tech and information law in Montclair, NJ with the firm Lance Rose & Associates. He can be found on the Internet at elrose@path.net, and on CompuServe at 72230,2044. He is also author of SysLaw, the legal guide for online service providers, available from PC Information Group at 800-321-8285. - Editor]

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7BIT DELPHI AND CHANGES ON THE INTERNET

by Walt Howe

Will the coming of Delphi to the Internet and its larger rival services following behind change the nature of the Internet? Delphi has been connected to the Internet for two years as of July 1994. During that time, although Delphi releases no figures, it has clearly more than doubled in size, more likely quadrupled. Old timers on the nets have expressed fears that the existing established culture on the nets will be drastically changed by the coming of a different type of user. Is this true? Will the quality of life on the nets be lowered or diluted by all the new users? Many changes are visible during the past two years, since the coming of Delphi. Large anonymous FTP sites from which files could be freely transferred back to your computer have become much harder to get into. Search utilities have come along to make finding things on the chaotic nets much easier, but as numbers have grown, they have become inaccessible for hours at a time. Is this a step forward or backward?

The most visible culture shock has perhaps come in Usenet newsgroups, where newcomers are most visible. There are thousands of newsgroups, each devoted to a discussion topic through messages posted for all to read. The newsgroups range from serious topics like `bionet.molbio.genome` program to not so serious topics with titles like `alt.flame roommate` (yes, I know that is very serious to some) to the ridiculous with titles like `alt.sex.bestiality.barney` (for people with purple newt fetishes). There are no rules or regulations to follow in this vast system, except those that the users establish for themselves. Because it is so unregulated, the culture has replaced it with expectations just as rigid as any set of laws could be, and these expectations are enforced by the users. Users are expected to stay on topic and not run off on wild offshoots, particularly on the serious newsgroups. Newcomers are expected to know enough not to post a chain letter titled `MAKE.MONEY.FAST` or to ask for get well cards to be sent to Craig Shergold (who got out of the hospital years ago). Advertising is frowned upon, unless it

contributes strongly to the interests of the group, and is presented in a very low key way. Beginners are not expected to ask beginner questions on any group, except those set aside for the newbies. Many groups regularly publish a FAQ (Frequently Asked Questions) file for the sake of newcomers (and old timers, too), so they will not ask a question that has been asked and answered 237 times before. (These FAQ files are great sources of information, whether you want to find information on modern encryption techniques or where the best nude beaches are in Arizona.)

What happens to newcomers who do not observe these and similar rules of netiquette? They are likely to receive a lot of e-mail. A LOT of e-mail. It will range from calm explanations of what they did wrong to gross insults (flames) that would make a Marine drill sergeant blush, some of it very creative. Or they will receive copies of very large files (sometimes a core dump) to "educate" them better. For people whose mailbox has limited size and particularly for those who are charged for the amount of mail they receive, this retaliation can be quite significant.

Newsgroups are very good at self-regulation. They are so good that when a small law firm in Arizona decided to flood 5000 thousand newsgroups with their ads in a very well publicized case, the retaliating e-mail shut down the small Internet provider they used for hours. Not that the result was a good one for the provider! What does all this mean for Delphi or for those to follow? Or conversely, does a flood of newcomers through these sources get beyond the capabilities of the nets to police themselves. Will the flood of new users overwhelm the culture of the nets and change it irrevocably? Let's look at a few considerations that will try to answer this question.

Estimates of the number of users on the nets now range from 20 to 30 million worldwide. There are still more users with full access to the nets in universities than anywhere else. Every September, the universities add a new Freshman class, which adds more users at one time than the commercial services by a large factor. The nets have gone through this influx regularly for a long time. The universities are still adding new connections or expanding old ones regularly, too.



The nets continue to double in size every year. By a year from now, we are projecting 50 million users. At best, the commercial services such as Delphi, AOL, and CompuServe, even if all their subscribers used the Internet regularly, are just a small part of the overall growth. The rest of the growth will be made up of smaller and smaller businesses, smaller colleges getting connected for the first time, much more use of the nets by students outside of computer science and engineering, more use by public schools and libraries and state and local government, more use by BBSs getting connected directly, and much more use in all these categories by other countries. The connections of the commercial services will not revolutionize and change the nets in any significant way; they will be a small part of the inevitable changes that are going to occur for many reasons.

THE GIVERS AND THE TAKERS.

One aspect deserves a closer look in considering the role of commercial services. The universities and even the federal government have a strong tradition of giving to the nets. For all the resources that people in an organization take from the nets, they try to give back good value in return. This value takes a lot of forms. It may be contribution of databases of information, such as space related reports and images, oceanographic research information, or texts and analyses of great literature. It may be library catalogs from thousands of libraries and in some cases, full texts of books, journal articles, and research reports. It may be

free software from a long tradition of sharing developments with the world. It may be in developing and sharing net utilities that meet a widespread need [See sidebar on Archie]. It may be in supporting the new communities such as Free-nets and community libraries and schools. As long as the givers balance the takers, the net remains very healthy. Where do the commercial services fit into this balance? Must they just be takers? Can a bottom line organization afford to be a giver as well as a taker? A key question is whether a commercial organization can even participate in the nets if it is not a giver as well as a taker? Is it enough to say that by giving access to thousands of people who would not have access otherwise, the organization is a giver?

While there may be some merit to the argument that the organization is contributing the goal of universal access, the answer is, of course not! Delphi has been a taker for the most part so far. Is there any incentive for it to do otherwise, and return value to the nets? There is a social contract among participating organizations. MIT, one of the founding organizations of the Internet, has long devoted considerable machine time and space to the major FAQ archive on the Internet. Delphi recognized the value of FAQ files for its members and was pointing gopher menus straight at the MIT archives. MIT observed that Delphi was the major user of its archives, and informed Delphi that this was unacceptable, since there was no quid pro quo in the arrangement.

Delphi responded to this very reasonable observation in two ways. First, Delphi brought mirrors of the most popular FAQ files directly into its own disks, so that requests for them did not go to MIT. Second, Delphi set up a caching system of automatically holding the most common outside requests from MIT and elsewhere in disk memory, so that files that were accessed repeatedly by different users only required a single access to the original files. The next request for the same file does not go outside of Delphi, but accesses the cache. This substantially reduces the load on the original provider.

Thus, while Delphi has not added to the GIVE side of the equation, it has substantially reduced the TAKE. The balance is not there yet, but it is much improved. So there are good economic reasons for a commercial organization to reduce the TAKE. Are there reasons to move to the GIVE side? There are

several good reasons why an organization such as Delphi should move that way. For one, we have seen that the Internet culture can police itself very effectively. Whether it is individual flames to those who post ads in the wrong place or it is big MIT saying to Delphi that they are out of balance, the issue must be attended to.

If Delphi doubles in size again in the next six months, it must find the right answers to remain a member in good standing with the Internet community. It doesn't mean just reducing the load on MIT's FAQ files, but reducing the load on various other popular files and utilities. Such as Archie, Veronica and WAIS search utilities. It puts a big load on World Wide Web servers elsewhere as this network grows rapidly in popularity. The only way to reduce the load is to put up servers of its own for each of these utilities. And just as important, it can only move to a balance between give and take by making these servers available to the nets, too, for others to use. Delphi's peak loads are in the evenings. University peak loads are in the afternoons. If Delphi's utilities are made available to the rest of the world during Delphi's quieter hours, the necessary balance is in sight. And Delphi says they are moving in this direction.

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When the Internet was small, it was easy for a good net surfer to keep up with the files available for FTP at the various anonymous FTP sites that all could log into and get files from. But as the nets grew, it became increasingly difficult to keep track of all of them. About four years ago, Peter Deutsch and Alan Emtage at McGill University in Canada created software that would survey each FTP site once a month or so and build an index of all software at these sites. This was the one of the first of a new generation of search software. People from all over the Internet could then log into McGill U and use the Archie (short for archiver) utility to find software or files of their choice.

In the true tradition of the Internet, they gave away the software so others could use it, too. This worked very well for a while, but one day, it came to the attention of the McGill administration that over half the packets flowing into Canada from the US and elsewhere were coming to the McGill Archie server. The administration was horrified that they were subsidizing the whole world, and pulled the plug on the McGill archie. Fortunately for the community, several more archie servers were in use by that time, thanks to the proliferation of the software. Deutsch and Emtage have moved along to form the company Bunyip, and are developing and marketing some very much improved search utilities growing out of the original archie ideas.

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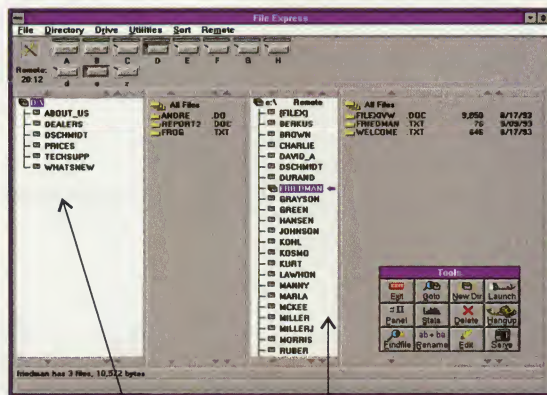


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AOL MAKES A STRATEGIC MOVE FOR THE FUTURE TO FROM GUI TO MUI



By Dave Tennant

INTERNET UPDATE

A couple of columns back I wrote about the Internet on AOL. At the time the only service available was e-mail, but there was the promise from the service that their GUI interface would not only explore the breadth of the Internet, but the depth as well.

Working to keep that promise, AOL has added WAIS and Gopher databases to its-More-Internet Area. WAIS (pronounced "wayz") stands for "Wide Area Information Server" and is a tool used on the Internet for searching databases such as NASA, congressional contact information, and even the complete works of Shakespeare (it's all there; I checked).

Gopher, named by the development team at the University of Minnesota after the school mascot, the Golden Gopher, is probably one of the most powerful resources an Internet traveler can employ because it lets the user "dig" through information resources in easy to navigate menus, or lists. AOL's Gopher is not quite as easy to use if deep exploration and freedom of movement on the Internet are a user-priority, especially when compared with Mosaic or other GUI flavors of the Internet. (For other reasons, see AOL Has Gone Internet" in the June 1994 issue). AOL has sought to have its

Internet interface be consistent with the rest of the service and that necessarily slows it down. Even still, it is a valuable service for those not fortunate enough to have a SLIP connection. Gopher is essentially an index using the common folder metaphor. Best used as a browsing tool, Gopher allows the user to see all the information available regardless of whether or not one knows the IP address or domain name. Gopher also offers the user the ability to distribute items read through Gopher via e-mail. A fertile source of information, Gopherspace is a further expansion that will lead Internet explorers even further out into the far reaches of cyberspace.

Looking to make AOL even more Internet capable, the folks in Vienna are testing TCP/IP connectivity to AOL's network. TCP (Transmission Control Protocol) is the way all the Internet hosts communicate with one another transferring mail and files. The only game in town and somewhat dated, TCP/IP is a bit on the clunky side. TCP/IP allows one to send any kind of information (text, sounds, graphics) across the Internet in smaller pieces that are easily managed. Separating the information into chunks, TCP then verifies for any missing pieces and reassembles it back in the correct order.

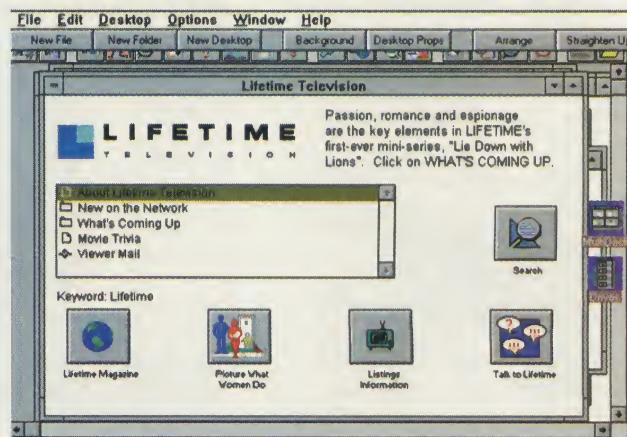
IP (Internet Protocol) is a method of distributing e-mail in packets or clusters through special purpose computers called routers. Much like a post office, IP manages each message's address, routing as a paper letter would find its way in the snail mail.

"To broaden the appeal of online services and reach an audience of tens of millions of people, online services need to do two things: leverage multimedia to create more engaging services, and develop new sources of revenue that can help subsidize the cost of creating innovative content." So said Steve Case, President and CEO of America Online, which continues its march toward one million subscribers. AOL announced in mid-May that they have passed the 800,000 mark, tripling their customer base over the past year and making America

Online the nation's (make that the world's) fastest growing service. Now comes word that AOL may be making the strategic alliance of its future, charting the path for multimedia applications in the current server mode in anticipation of newer broadband technology.

Last May 11, AOL and Redgate Communications Corporation posted an announcement that they had agreed to a merger to be made complete sometime in mid June. One thing Redgate and AOL have in common is that both have in the past been ventures with or related to Apple Computer, Inc. Although AOL's ever growing userbase is over 70 percent PC-based — AOL continues to have a huge Macintosh following in comparison to other services. AOL is also reported to have licensed some of their communications software technology to *Apple Computer*. Redgate has published several Apple Computer Directories, which were also sponsored (paid for) by Apple. AOL apparently is seeking to be the first on the block to take the fresh approach and accelerate the convergence of online services with multimedia capabilities.

AOL has hinted they are working to provide new ways for its customers to transact their business and pleasures in



different forms of interactive marketing. Everyone in this emerging market of interactive media is a relative newcomer, but Redgate is a leader. Redgate (not affiliated with Bill Gates) manages multimedia databases and delivers its content via custom publications such as CD-ROM, cable, broadband, demand fax, private satellite networks and digital shopping clubs. A privately held company, Redgate is based in Vero Beach, Florida, and

according to AOL press releases, employs approximately 100 people in points as far flung as San Francisco and Paris, France.

Redgate's partners and customers are as impressive as AOL's, including the likes of Apple, IBM, EDS, BellSouth, US West, Fidelity, Sun Microsystems, Intel, Olivetti, Racal Datacom, Knight-Ridder, Novell, Xerox, Microsoft, Motorola, NYNEX, Prudential, Pacific Bell, Hewlett-Packard, Fairway Technologies, among others. The company's revenues last year were approximately \$13 million. According to AOL the biggest change this new alliance will yield is to strengthen its franchise in interactive services. Agreeably Redgate will help AOL create new marketing opportunities by aiding in its transition from a graphical user interface (GUI) to a multimedia user interface (MUI). AOL's Windows and Macintosh software already supports digitized speech attached to events such as "File is Done," "Welcome," and so on. The merger could meet both of Case's previously mentioned imperatives by "helping [to] accelerate AOL's entry into interactive advertising, transactional marketing, broadband services, and cable..." So says AOL spokesperson Pam McGraw, who adds that the merger will also help "to create new revenue streams." so far, there hasn't been any mention from AOL of how much if any investment capitol this merger will make available.

Clearly, AOL is going to need big bucks to finance necessary expansion of their backbone and capacity. It may be that AOL is gaining more than just technology by merging with Redgate. A timely infusion of cash as well as a way to downplay hefty expenses in infrastructure are probably also involved. No doubt, this merger will help improve their reported earnings, which are expected to level off or decline as they start spending more to support all their new members. Financials notwithstanding, AOL's savvy in online expertise and Redgate's skills in interactive media may be just the ticket to position AOL to lead the way in opening up a new medium with mass market acceptance. Case said it best, "... online services lack pizzazz, and CD-ROM titles lack connectivity..."

The combination of America Online and Redgate enables us to create hybrid offerings that marry the best attributes of each ... [and] will serve as the training wheels for an eventual broadband world." For those of you with an eye toward investment in AOL, here's a little clipping of the details of the merger: "The merger of Redgate Communications with a wholly-owned subsidiary of America Online is expected to be completed by mid-June 1994, subject to approval by Redgate shareholders, the effectiveness of a registration statement to be filed with the SEC, and other customary conditions to closing. Redgate shareholders will receive **444,184** shares of America Online common stock for all



'Seinfeld' Cast
Photo: George Lange

NBC, Inc.

outstanding Redgate common and preferred stock and warrants, representing approximately 6.2% of the total number of shares of America Online common stock that will be outstanding immediately after the merger. Additionally, **103,383** shares of America Online common stock will be reserved for outstanding employee options issued by Redgate and being assumed by America Online.

The transaction will be effected on a tax-free basis and will be accounted for as a pooling of interests. In connection with the merger, Ted Leonsis will continue as President of Redgate Communications and will also serve as an officer of America Online, reporting to Steve Case. Redgate will operate as a subsidiary, continuing its headquarters operations in Vero Beach, Florida." Well just what does Redgate Interactive do? Redgate's Interactive Information Networks (IIN) provide AOL subscribers with access to computer industry news and the latest technological developments with the only difference, at least as Redgate puts it, being that there is no middle man. The information



Helen Hunt and Paul Reiser
Photo: Chris Haston

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the subscriber receives via IIN comes directly from the source - from the high tech manufacturer or service company...using their language, unedited and unfiltered. According to the AOL literature, it's the kind of "inside" news that these companies want their most influential trade press analysts and consultants to know about.

None of this was up and running when I looked into it, but it promises to be a boon for information hungry people in the computing and technology fields, because Redgate and IIN will provide AOL subscribers the opportunity to meet and chat live with industry leaders and the top management from such companies as Apple, IBM, Microsoft, and Motorola in Redgate/IIN's Events Auditorium. Even better, Redgate is going to provide a look at different specs for equipment used in multimedia, as well as multimedia programs. I am currently in the market for a new (and bigger) hard drive, so I took the opportunity to browse through the specs of some of the information offered on Redgate. Doing a standard search, I got a listing of several devices, descriptions of which I could read and find information such as storage size, speed and access time, caching, design, warranty, and cost. I am guessing but from what is available now, there will probably be a facility to post particular questions back to a service rep for hardware/software specific questions. If there isn't at least, there should be.

Ziff Davis Publishing's Computer Library has even more extensive information on CD ROM starting at \$1,200 a year for a new CD each month that has both an MS-DOS and Windows version

on it. The Windows version has a very nice interface which wonderfully formats the information for viewing and printing but is admittedly a bit on the pricey side, and the online version is nowhere near as nice. But there's more to the story here than just Redgate's multimedia information databases. AOL is bringing in other forms of media as well.

AOL COVERING CABLE, AND OTHER ALLIANCES

AOL recently announced it is going to expand its television content to offer television listings and interactive bulletin boards for over 75 cable and broadcast channels such as Bravo, Cinemax, Comedy Central, The Discovery Channel, HBO, and The Learning Channel. (The last time I checked, none of these were yet available.)

The idea is to provide enhanced online areas that include interactive bulletin boards, show schedules, and discussions with producers and guests. The Discovery Channel and The Learning Channel are further going to provide interactive educational bulletin boards and conferences hosted by members of the VCR (Video Classroom Resource) team. Partnering with Tribune Media Services, AOL will provide date, time, and channel listings of all TV shows, and the new "Viewer Area" will also have interactive bulletin boards for over 75 cable and broadcast channels, hosted by TV "buffs" (read that, couch potatoes with a Master's in Vegging) for members to discuss cable programs.

This is a big jump from having just isolated forums like "Lifetime"

For me a big boon is the deal AOL made with the Journal Graphics transcript service that'll allow me and others who use the service to order transcripts of shows like "MacNeil-Lehrer" and "This Week with David Brinkley" online. There's a Trend Here... in addition to all the aforementioned services coming online with AOL, NBC TV recently joined up (so far, the only major network to do so with any major online service). Want to know the scoop on Jerry Seinfeld of NBC's immensely popular "Seinfeld"? Or do you want to see if Phil Donahue's wearing a dress this week, or if Deirdre Hall (Dr. Marlena Evans Brady) was ever rescued from Stefano the seducing kidnapper? Just keyword "NBC" and click on the "Shows" button.

All kinds of information is available about programming, Star Bios (did you know Kelsey Grammer surfs?), upcoming guests and topics. I even found out I could get tips to attend a taping of one of my favorite shows, Frasier, (which is unfortunately going to have to run up against "Roseanne," another of my favorites, next year). This is really the nerdy couch potato's dream! Picture this: a serious spudling in training can be laying in the barcalounger enjoying the latest afternoon episode of "Days of Our Lives" and armed with a laptop and modem can simultaneously go on AOL and try to answer questions for a contest which could lead to a trip to an NBC show and visits with the stars! After winning the grand prize, our Potato can move over to the NBC merchandise and sales area

and purchase the latest in mugs, pins, hats, jackets, gossip biographies, or download a publicity shot or episode still-shot from his/her favorite NBC show(s). Want to access NBC programming for the upcoming week, check on the file "Upcoming Topics and Events." Launched in May, NBC Online is another step closer to the world of interactive TV that will doubtless pay a profit as well as big dividends to NBC in research of consumer patterns.

Everyone is getting ready for the converging roads of interactive media, when this type of service moves to the screen of full interactive TV. This is a bit of a coup for NBC, the first major network to be represented on one of the nation's commercial online services. "Because America Online is recognized for its ease of use, affordability and real-time interactive features," stated *Alan Cohen*, the Senior Vice President of Marketing for the network, "we hope to capitalize on interactive technology." Giving away the bullets ... But don't shoot off the gun. All this info and all these pictures and bios are tantalizing indeed. I mean, have you ever tried to get a photo from one of the studios? While nice, they are generally a basic

black and white glossy. From NBC Online though, one has the opportunity to download full color photos of cast pictures, individual stars, and really neat still shots from an episode. There is no extra charge for downloading; the only cost is connect time unless you are over your five hours per month. Downloading costs no more than just browsing the service, and there is no premium to use NBC Online or to download any items in its libraries. What is a bit fuzzy though is this: what exactly can you do with them? These photos are the property of NBC with all the copyright protection therein. Users of AOL can download them to view, but, as in all copyrighted material on a public BBS or Online service, cannot be passed on to another user or reused in any other form.

I'd have to figure that this is going to be a can of worms because, correct me if I'm wrong, but doesn't this stuff get around? Aren't we gonna start seeing cast shots of Seinfeld on BBSs across the country. According to NBC, "...except as otherwise specifically permitted herein, all materials (text, video, photos, graphics, software) contained and transmitted as part of

the NBC Online Service (or downloaded from the NBC Online Service) cannot be broadcast, duplicated, edited, manipulated, published, rented, sold, publicly displayed, used in litigation or used for commercial or promotional purposes." Let me see if I can put that in English. I can download it, and I can look at it, but I cannot send it to my friend, (even another member on AOL) and I cannot post it on my BBS (if I had one). I can tell my friend where it is, but he has to go get it himself. The same is true with sounds and stills and text. Yikes!

Think of all that litigation NBC would be in if they decide to legally follow up on that one! In the meantime anyone who wants to download the file **TENNANT.TIF** from the Boardwatch Magazine BBS for upload to other BBSs, for making tee shirts, or for giving as gifts to friends is hereby authorized. This offer does not include morphing my "image" or use of my likeness on any "Wanted" posters. Until next time.

[*Dave Tennant is an Economics and English Instructor in Southern California. He can be reached on America Online at "Dtennan" or on the Internet at dtennan@eis.calstate.edu*]

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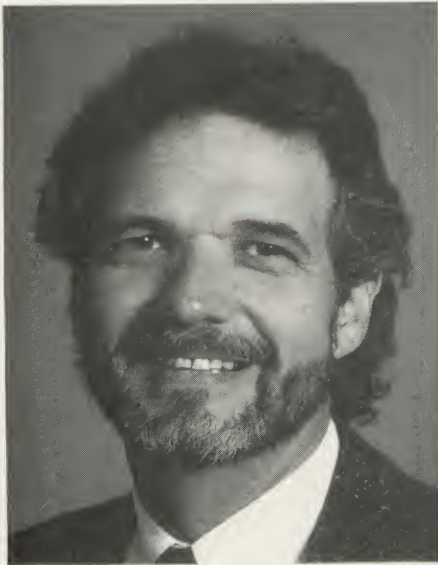
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PRODIGY

PRODIGY MAY BE THE NEW CHANNEL ON YOUR CABLE TELEVISION DIAL



by Ric Manning

Most Prodigy subscribers have to make do with 9600-bps access. But members in Fairfax County, Va., will soon be able to use the service at speeds up to **1,000** times faster.

The Washington, D.C., suburb will be among the first areas in the country where computer users will have the option to connect to Prodigy through the local cable TV system. Prodigy and Media General, the cable system in Fairfax County, signed a deal in May that could be the forerunner of many more partnerships between online services and cable companies. "The cable industry is our future," said Prodigy Vice President Scott Kurnit in announcing the Media General arrangement at the National Cable Television Association's annual meeting in New Orleans. "If we could today switch all of our users from telephone to cable, we would do it."

CompuServe and America Online also are known to be exploring cable-based delivery. CompuServe, for example, has a pilot program in Exeter, N.H., that tests CompuServe access over the local cable system. And some prototype systems on display at the cable trade show demonstrated cable connections to the Internet. Online service subscribers

will see several immediate advantages to using the cable's black coax:

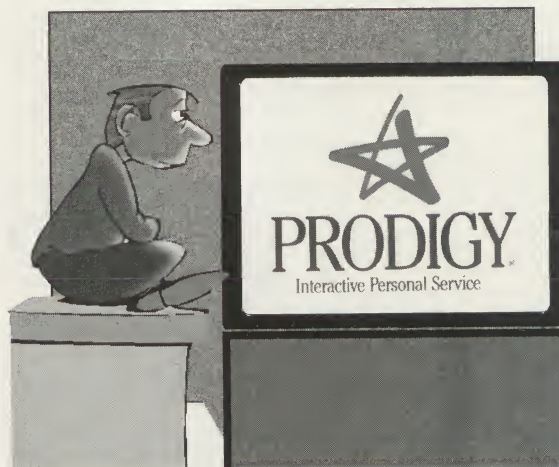
Speed: Cable can deliver data far faster than telephone lines. The increased speed will allow Prodigy to integrate multimedia elements. Instead of clicking a button to see a photo with a news story, subscribers will get the text, picture and sound in the same package at the same time. Live links: Cable users don't have to log on to Prodigy when they want to use the service. They merely switch to their cable connection, much like changing channels on the TV. Cable subscribers can be notified of newly-arrived mail, even if they're not actively using the service.

Open phones: With a cable connection, Prodigy subscribers will keep their phone lines free. They won't be forced to buy a second phone line or risk the wrath of other family members for tying up the line. Plugging a computer into the cable won't be as easy as plugging in a TV. Computer subscribers will need a special cable modem to translate the RF signals that come over the coax. At least three companies have cable modems in the works. Zenith Electronics Corp. has a box that it hopes to sell to cable systems, which would then sell or rent them to subscribers. Intel and Digital Equipment Corp. expect to have their cable modems in retail stores by next year with prices starting at about **\$500**. The modems are capable of moving data at speeds at about 10 million bits per second — fast enough to put a high-resolution color photo on a computer screen in about 10 seconds. "Cable takes our current business and makes it better," said Prodigy's Kurnit. "Consumers want sound and photos and video." Cable operators, which are

gearing up to rebuild their systems and add two-way capability, are also anxious to start serving computer owners. "If we were to ignore computers we would be crazy," said Don Mathison, senior vice president at Media General. "In Fairfax County, over 60 percent of our subscribers have computers and over 30 percent of them have modems." At the national cable show, Prodigy also demonstrated a service that would act as a companion to existing cable channels. While watching an NFL football game, a viewer could press a button on the TV's remote control to bring up the Prodigy service. The game picture would shrink to about 80 percent of normal size and the Prodigy options would appear in a wrap-around menu. Viewers might use the service to check the status of other games or bring up team and player statistics for the game they're watching. The service could also link to a home version of QB1, the interactive game played in sports bars that lets players predict the action. The service could also be used to link stock quotes and business information on Prodigy to the CNBC business channel.

MORE SHOPPING OPTIONS

You might think that Prodigy already has so many shopping options that it couldn't squeeze in any more. But you'd be wrong. Starting late this year, the mother of all shopping services — Home Shopping Network — will arrive on Prodigy with more than 1,000 items for sale. "It's going to be huge," said Prodigy's Carol Wallace. The service will be HSN's first foray into the online world. "There is a tremendous potential for growth," said Jeff Gentry, president of HSN products. "Our partnership with Prodigy will keep us in the forefront as the demand for more and more interactive systems grows." HSN sees Prodigy as a tool for target marketing. Some of its cable TV viewers may be happy to sit through an hour of cubic zirconium offers and commemorative Elvis plates waiting for something worth buying. But busy young adults don't have that kind of time. They want to be in charge of their shopping, not leave it up to the network. The new service is also a step toward the eventual merging of TV and online content. With its recent ESPN deal and now its connec-



HSN, Prodigy is clearly pointing toward the time when it will deliver video in an interactive environment. And while some Prodigy subscribers may be annoyed by the commercial content on the network, Prodigy insists that there are plenty of members who see it as a valuable feature. According to Wallace, Prodigy users spend an average of 10 percent of their online time shopping or reading ads. "There are very specific products that work, and we're still learning what they are," she said. Some products don't sell well online because they require a "touch and feel" factor. One service that Wallace says has been a runaway hit is PC Flowers.

PRODIGY SIGNS COMICS CHARACTERS

The futuristic Tekno-Comix characters from BIG Entertainment's multimedia comic books are on their way to Prodigy. Starting in August, the Tekno-Comix Forum will provide Prodigy members with access to online interviews with Tekno-Comix creators, artists and writers, sneak previews of upcoming comic book issues, contests and writer and artist profiles. BIG's comic books include characters created by celebrities such as Leonard Nimoy and Gene Roddenberry; authors Mickey Spillane, Anne McCaffrey, John Jakes and Isaac Asimov; and popular comic book writers including Neil Gaiman and Max Allen Collins. Other features in the section will include cover photos for upcoming issues, synopses of current issues and author and artist profiles. Members also will be able to write to Tekno-Comix directly via e-mail.

DAILY DOSE OF LETTERMAN

Now you don't have to stay up late to catch the Top Ten list on Late Night with Dave Letterman. The lists, direct from the Home Office in Sioux City, IA., are available every day on the new CBS network section on Prodigy. Jump to CBS. No. 10 from a recent list of announcements that will make the studio crowd cheer wildly: "Hillary Clinton is buying cattle futures for everybody."

Ric Manning covers business technology for The Courier-Journal in Louisville, KY. He gets e-mail on Prodigy at USJM92A, on CompuServe at 72715,210 and he's ricman@igluu.com on the Internet.

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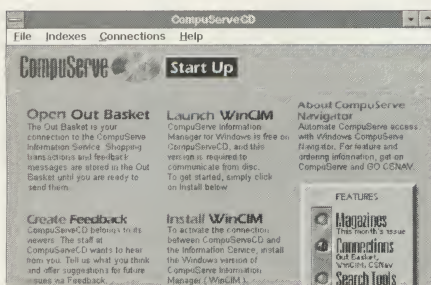
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TIRED OF DOWNLOADING JUMBO MULTIMEDIA FILES? COMPU SERVE PUTS THEM ON CD

by Ric Manning

Imagine how CompuServe would look to you if you worked for the network. Connected by a local network, you could instantly pull down any of the thousands of pictures, video clips or sound files and run them on your desktop PC. No waiting for modem transfers and, most importantly, no hourly access fees.

Now you've got a good picture of CompuServe CD, a new CD-ROM that CompuServe calls a multimedia extension of its online network. The pilot version for Windows was released in May and a Macintosh version is in development. The price of the disc is **\$7.95**, including a **\$5** usage credit. CompuServe's initial plans are to sell new versions of the disc every other month. If the project is successful, it will go monthly sometime next year.



CompuServe sees the disc as a preview of the sorts of material that will eventually come down the Information Superhighway. With CompuServe and other online services cozying up to cable TV operators, the services may soon have the necessary bandwidth available to quickly deliver a CD worth of data to desktop computers.

For now, though, the CompuServeCD is only modestly integrated with the online service. It's more of a sampler of some of the goodies tucked away in CompuServe's file libraries that you may not know about or may consider too expensive or time-consuming to investigate. It also has the strong scent of an advertising vehicle. Many of the features are thinly-disguised sales

itches, a characteristic that, judging from some of the responses in the CompuServeCD Forum (GO CCD), is not terribly popular with early customers.

The CD is organized in a magazine format. From the opening screen, you can click on the Scan button for a brief introduction to the disc and previews of some of the features, or choose "Jam With Jimmy" to see and hear Jimmy Buffet do live version of "Cheeseburger In Paradise" from his concert album. The video clip — which runs more than **30** megabytes — is a good example of the kinds of material that fit nicely on a CD-ROM but would be impractical to download.

You also get the latest version 1.29 of CompuServe Information Manager for Windows. You can install it fresh or use it to update existing WinCIM. The program will install without altering any of your preferences or stored files.

Computer graphics gets center stage in the pilot issue. The disc contains MMGIF, a fully operational version of a new GIF image viewer that adds a soundtrack to a GIF slide show. There is also a profile and a demo version of Kodak's new photo-to-digital converter, a video interview with the executive director of the Optical Publishing Association, some nice fractal images and a how-to on downloading and viewing GIF files.

Turn the page to entertainment features and you get music clips by Ted Hawkins and Counting Crows, along with text files on the artists' backgrounds, a profile of the Wild Colonial band and preview trailers for the summer movies "Even Cowgirls Get the Blues" and "City Slickers II."

Much of the rest of the disc is blatantly commercial. There's a video chat with real estate pitchman Frank Gallinelli, an offer to buy a dog-training video, promotions for trips to Belize and Antarctica and appearances by some of CompuServe's home shopping sponsors, including PC Flowers and MicroWarehouse.

The video clips that accompany the promotions are a good idea, but they appear in such a tiny window and at such a low resolution that they are little more than a curiosity. The exception is the Buffet video, which is

brighter and clearer than the others and can be resized to a larger and more comfortable window.

Perhaps the most useful feature of the CompuServe CD is its off-line file finder. The utility includes a huge database of files from the service's IBM and Graphics libraries. You can search by keyword, author or upload date across nearly 100 forum libraries, just as if you were online, or browse the files in individual forums.

The files are displayed in a dialogue box much like the one built into WinCIM. Point to the file name and you get the file's size, source and description. You can highlight the ones you want, then select another option to will automatically retrieve and store them. The novelty of the disc's other features may quickly fade, but if you use CompuServe as a primary source for downloads, the CD is worth its price in saved search time.

MAYHEM BY MODEM

Murder, vice, violence, theft, fraud, espionage, genocide, terrorism and political persecution.

Sure, you can find plenty of that on TV, in the newspapers and in the bulging True Crime section of your favorite bookstore. But if you want to get closer to the action, try Time Warner's new Crime Forum on CompuServe (GO TWOCRIME).

Want to be an amateur detective? Interpol is using the network to distribute wanted posters for stolen art objects from around the world. The GIF files are in the General/Forum Help Library.

The discussion section is a buffet of crime topics. Among the most active are the sections devoted to murder and violence, bizarre and unusual crimes, corrections, crime writing and Hot Topics. There is also a section devoted to victim recovery.

"You are on notice," says the forum's welcoming message, "that much of what you find here will be unsettling: photographs and crime reports, frank discussions among survivors and law enforcement agents, and blunt information on how to avoid being victimized."

AEROSMITH SINGLE

Aerosmith fans who want the band's new song "Head First" had to turn to CompuServe to get it. Instead of putting the song on the band's "Get a Grip" album, Geffen Records decided to dabble in electronic distribution.

Geffen put the song in its section on CompuServe's Music Vendor Forum starting June 27. The record label has long offered 30-second clips of its artists' music, but this was the first time a full-length song was offered online.

"If our fans are out there driving down that information superhighway, then we want to be playing at the truck stop," said Aerosmith lead singer Steve Tyler in a press release.

The three minute and 14-second song is available in two formats. A stereo version takes up 4.3 megabytes of hard disk space and a mono version needs 2 megabytes.

Downloading the stereo version takes about 60 minutes at 14.4 kbps and about 90 minutes at 9,600 bps. For the first month, CompuServe is waiving download fees, but after that, regular charges apply. That means getting one song could cost **\$15 to \$20** — about the price of an entire CD.

To play the song, users need a Windows PC with a sound card. CompuServe said

expect the sound to be "broadcast quality."



WHAT'S NEW

CompuServe dove into World Cup Soccer this summer by offering a special section devoted to the teams and the games. Banking on its international presence, with members in nearly 140 countries, CompuServe posted news, photos, playing schedules and profiles of players in its World Cup section (GO WCUP). In addition to reports from the Associated Press, CompuServe also drew on the French and German news wires and posted pictures in the Reuter News Pictures Forum (GO NEWSPIX).

Consumer Reports has updated the online version of its 1994 new car ratings (GO CONSUMER). The posting includes ratings and profiles of nearly 200 1994 vehicles along with prices and reliability predictions. The section also includes Frequency-of-Repair Records for vehicles from 1988 to 1992.

Expanding its multinational offerings, CompuServe now posts news from wire services in the United Kingdom, France and Australia. The UK news is from the Press Association (GO PAO), the French news comes from Associated Press France en Ligne (GO APFRANCE) and news from Down Under comes from the Australian Associated Press Online (GO AAPONLINE). All three wires are included in CompuServe's Basic services.

Current events and cultural issues of interest to African Americans are now available in the African American Art and Culture Forum (GO AFRO) sponsored by American Visions, the official magazine of the African American Museums Association. Message section and library topics include a calendar of events, art, music, cuisine, history, travel, books, genealogy and education.

BRAGGING RIGHTS

Who's got the biggest . . . membership list?

In June, CompuServe announced that its subscriber list topped 2 million worldwide. That made it, in CompuServe's words, "the largest active membership of any online service."

Prodigy routinely calls itself "America's most popular online service with more than 2 million members." They may both be correct.

Much of CompuServe's recent growth — about 80,000 new sign-ups every month — has come overseas. The service now offers native language interfaces for subscribers in France and Germany.

Prodigy, however, is available only in the United States.

Regardless of which service is larger, both services are riding the crest of the explosion of interest in online services. Let's see, 2 million CompuServe subscribers paying **\$8.95** a month should produce . . . about **\$18 million**.

(Ric Manning writes about computers and technology for The Courier-Journal in Louisville, KY., and a weekly column on computers and consumer electronics for the Gannett News Service. Ric reads his E-mail at ricman@iglou.com on the Internet, 72715,210 on CompuServe and USJM92A on Prodigy.)



Mars scape found on CompuServe CD

LOOKING INTO GENIE



by Lenny Bailes

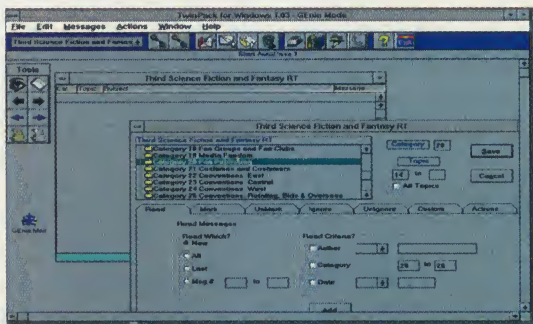
This month GENie is still turning up new graphic user interfaces. As we mentioned last month, the official "GENie for Windows" front-end in beta testing contains no automated script functions. Now you can download Twinpack, a new shareware front-end, from GENie's Windows RoundTable (Page 1335). Twinpack is an easy-to-understand Windows offline manager with many of the same capabilities as Aladdin (the DOS-based front-end). Twinpack has a script language that lets you perform standard or custom autopass downloads. The pre-configured script options let you select various Roundtables or individual topics, and specify what you want to download according to all of GENie's message options. The package includes a pop-up terminal screen, a file library manager, an automatic response editor, and an e-mail manager. Twinpack has an easy-to-understand interface that could make it popular as a substitute for Aladdin, but first they need to get the bugs worked out. The current version of Twinpack behaves erratically, crashing unexpectedly in the middle of various file management chores. But Twinpack has greater potential as a useful tool than the "official" Windows front-end offering from General Electric.

SPEAK YOUR MIND, TRUTH IS KIND

During the month of June, GENie's arts and literature-related Round-

tables presented a series of Real-Time conferences and special events focusing on censorship and related issues. Participating Roundtables included Writers, Comics, Music, Science Fiction and Fantasy, ShowBiz, Romance, Music, and Law.

The Romance RT had a session discussing/debating the inclusion of erotic, steamy material in genre novels, while the Comic and Music RTs thrashed around the issue of slapping contents labels on albums and comic books. Of course, in the comic-book industry this is an old, old issue, dating back to the days of psychiatrist Fredric Wertham's anti-comics crusade in the '50s. Wertham's ambition was to purge comic books of almost any material that made kids want to buy them in the first place. His published broadsides were responsible for the 15-year reign of the Comics Code Authority: a "voluntary" set of standards that banned the depiction of vampires, prohibited graphic depiction of violence, and forbade



Twinpack: GENie shareware Windows front-end

writers to allow "evil" or "crime" to triumph in any published story. A look at contemporary comic books will show you that the Comics Code Authority is now long gone, but the music industry may not be quite as lucky. Participants in this RT had a good time consoling each other, and reminiscing about censored lyrics in various rock 'n' roll singles. All agreed that Death-metal/industrial music, and rap singles can be pretty hard to stomach, but it's the parent's job to provide a filter, not the responsibility of the recording industry. There was also some discussion of the spillover of censorship into the video game market. An industry panel consisting of Sega, Nintendo, Electronic Arts and some other major vendors would make it compulsory for shareware vendors to submit a tape of

their game and a \$500 fee to an industry panel just to obtain a rating. The fact that the game companies who are proposing the ratings, panel, and fee are often stung by competition from less affluent shareware vendors did not escape the notice of the RT participants.

In the Science Fiction & Fantasy RT's Electronic Frontier conference several writers tossed around scenarios for nightmare government controls on modems and communication networks. RT participants with more Internet experience stressed that the whole thing is probably far too large and autonomous a structure to be regulated by the government. One editor opined "I wouldn't mind there being a law that cube-steaked and tenderized people who release viruses, but I've never seen a reasonable proposition for how to go about it." No one mentioned s-f author David Brin's "politeness worms." (In one story that Brin wrote, a net poster who uses too much obscenity in his postings gets tagged by a special "networm." The worm summarily informs him that his communications are now being monitored — henceforth, any messages that don't conform to a gentlemanly standard will be intercepted and deleted from the system.)

OTHER ROUNDTABLE NEWS

GENie's new New Age Roundtable held a live conference in June with a professional TAROT reader and teacher. Nina Lee Braden conducts classes on the second Thursday of each month to teach interested Aquarians how to delve into this font of divinatory wisdom. (NEW AGE, Mov 1122;2 at any GENie prompt.) The picture of the Moon you see floating around this column is from a Tarot deck under construction by Eugene Stewart Tiffany. It can be found along with other Tarot card samples in the New Age file library.

The National Broadcasting Company has taken a leap into the Information Age by establishing an NBC Roundtable (NBC, Page 1530). GENie users can now provide feedback to NBC programming executives on their favorite television shows or download photographs of NBC stars from the file library. (As part of GENie's June focus on censorship issues, the Law and Science Fiction RTs conducted a joint forum on Censorship and TV media.)

Genie's Antivirus RoundTable is now offering a free version of RSA's PGP: PGP, v. 2.6 Cryptography Toolkit. Previously, United States and Canadian citizens could download PGP from MIT via Internet. PGP 2.6 can be downloaded from Genie by logging onto the Antivirus RT (Page 1350) and consenting to RSA's license agreement. PGP is software that you can use to keep your e-mail private. It runs on commodity desktop systems, yet is secure enough that even the most powerful supercomputers can't break it.

Although PGP 2.3 is widely used outside the United States (and is infinitely more unbreakable than the ersatz "Clipper" proposal our government would endorse), the use of PGP version 2.3 in the U.S. potentially infringes patents licensed to Public Key Partners by Stanford University and MIT. In the past, this made use of PGP by American citizens somewhat problematical. MIT has addressed this issue in PGP 2.6 by using algorithms licensed by RSA Data Security, Inc. This license includes rights to all relevant U.S. patents on public key cryptography for non-commercial use.

The current version of PGP has been programmed a little differently than previous ones to resolve legal issues concerning patent infringements. A deliberate format change in version 2.6 of PGP will be triggered on September 1, 1994 to discourage people from continuing to use PGP 2.3a. Version 2.6 will continue to be able to decrypt messages generated by older versions of PGP. However, after 9/1/94, PGP 2.6 will start producing a new and slightly different data format for messages, signatures and keys. (It will still read and process messages, signatures, and keys produced under the old format.)

Genie's Antivirus RT is sysoped by Ross Greenberg, the developer of F-PROT, Integrity Master and VirX (antivirus packages which are highly regarded in the PC and Mac hacker communities).

GAMER NEWS

Allan Varney and Aaron Allston, two well-known freelance game designers appeared for a live conference in the TSR Roundtable.

This month two new multi-player fantasy role playing games were added to Genie's menu. Island of Kesmai

(Page 830) trains you to avoid the perils of a SuperVGA dungeon with either an MS-DOS or Mac-compatible 256-color interface. Muse, Ltd's "Through the Looking Glass" lets players strive from the status of mere mortal to the highest persona within the realm: a Games-Master. But the game resets itself every 104 minutes, wiping out all of your possessions and reincarnating you at a random location.

The Hundred Years War RT (HYW, Page 946) invites you to welcome summer by partying with the Mongol Hordes. HYW is a multi-generational



TIFFANY TAROT COPYRIGHT 1993 EUGENE TIFFANY

simulation of the 14th Century struggle between England and France. Created characters age and die over time, to be replaced by their children. Strategy also includes economic battles against rebellious peasants and land-grabbing peers. A new variant of the game proposes that strong kingdoms of



England and France never formed in the first place. Instead, European magnates must deal with with a Moorish kingdom in Cordoba and a series of Mongol invasions. This sounds a little bit heavier than the variant U.S. Civil War simulations we played with when I was in high school.

GENIE MAGAZINES AND NEWSLETTERS

Several new Genie multimedia magazines made their first appearance this month. (These publications are available in addition to LIVEWIRE, which appears every month in IBM, Macintosh, and straight-text formats.) The new Windows Genie LAMP contains a variety of hypertext articles about Windows products, some reports and rumors on CHICAGO, plus pointers to new shareware in the Windows file library. The Digital Publishing Roundtable (DIGIPUB, Page 1395) also includes Atari, Mac, and Apple II versions of Genie LAMP, and other assorted multimedia publications. DOS users can participate in a special DIGIPUB message forum that adds animated pictures and sound effects to text. This is implemented through a package called CONDOR/CONDOR PAINT which uses a souped-up IBM console driver. (CONDOR contains a superset of the usual PC-ANSI display features.)

The CyberSpace Weekly Report now appears every Friday on Genie (CYBERSPACE, Page 2000) with industry gossip, trade show reports, and new product information. This forum is currently buzzing with news of 3DO's recent agreement with Creative Labs to provide 3DO animation to PC users through a Creative Labs-produced PC-card.

The American West RT (WEST, Page 1065) carries "Wontanging Ikche", a text-based Native American newsletter from Usenet. It contains news of tribal doings, details on disputes with the U.S. government, and some good poetry. "Circles can link ... circles of many differences... becoming solving circles.. a healing matrix in cyberspace."

[Lenny Bales is a PC consultant, writer and teacher living in the San Francisco Bay Area. He is a contributing editor for Microtimes, a California computing magazine, and co-author of Byte's DOS Programmer's Cookbook.]

TELECONFUSION

HARDHATS AND TEDDY BEARS...WHAT'S WRONG WITH THIS PICTURE?

Since I've been doing these "freebie reviews" quite a few strange things have been arriving in unmarked packages here at the office. For example, Baseball hats, Tee shirts, Playing cards, Rubber ducks and even an occasional stuffed lizard or two.

If you recall, the cover from last month's Boardwatch it was a picture of Phil Becker with a clipboard wearing a hardhat and looking pretty darn professional taking notes or something in a room full of computers. I have to admit, my first impression was one of confusion. I mean what earthly reason would the prez of a major software company have to wear a construction helmet? Now don't get me wrong, I understand how tough the software business can be and how easy it is to pull a muscle when you're lifting all those floppies out of the box, but a hardhat? I can't recall the last time that there was a reported incident of any cranial damage resulting from a software crash. But hey, ya gotta admit it does look pretty cool.

With this thought in mind I decided to do it, in my usual "head first" approach, and put this fine looking piece of headgear to the test. Now I realize that this may seem like some sort of journalistic "deja Vu" because of the similar merchandise reviewed on these very pages not more than 3 months ago, but this is not really like the (now famous) Nethopper Hat. This is, for all intents and purposes, a helmet!

When I took the hat from the box I was surprised to find that this was not just a single promo item but there was a little "extra" included in the package. A small stuffed bear wearing a little eSoft tee shirt was hiding under the hardhat. Let me clarify, this was not a real bear that had been stuffed, but a toy "Teddy" type bear. I want to assure all you readers that are concerned about the endangerment of some of the wildlife on this planet that in no way is eSoft actually capturing and stuffing real bears for the promotion of their software product. This would be not only a cruel and rather disturbing act but can you imagine the shipping costs alone? At this point I decided that I would go with some pretty tough testing to really see what kinda stuff eSoft was handing out.

First thing that should be considered when one is thinking of wearing a hardhat is, of course, the durability factor. I mean after all, the whole reason for wearing a hat that is hard enough to drive nails with is not going to be for just the look alone...it has to work. I really was not too thrilled with the idea of this item not passing the test, I mean, we are talking about a pretty unforgivable medium here, namely my head. Not ever being one to



back down from much of anything, I began to think of ways to check out this important (if not essential) feature. No way around it, this was gonna call for some dramatic testing and I was just gonna have to face it... the "Go ahead and hit me on the head" test.

The preparation was far more complex than either the test itself or the equipment involved. Using the Louisville Slugger was my daughter's idea. This was the option chosen over my suggestion of just nailing me with a Nerf ball a few times...may have something to do with the recent discussion we had about her new boyfriend.

With my hardhat firmly placed on my head and my 330 pound good bud Harley poised on a three foot ladder just above me I was kinda ready. The next thing I knew there was a loud swooshing sound and then a blinding flash of light, seems Harley missed and nailed my fluorescent light fixture in the garage on his follow through...not good. O.K. lets try it again, my daughter said. Somehow her enthusiasm to make sure that this test was carried out did not make me feel like she was concerned about quality journalism. Once again, swoosh and...

I wasn't really unconscious (at least for very long) but from what the paramedic told me I was more like a seabass flopping around on a pier for a while. The first thing I thought about (when my basic thought process returned) was "what the hell am I doing this for and why are those people in the white jackets so interested in me? Then I started to remember "the Test". Well I must say, according to my new neurologist, if I'd taken a hit like that without the hardhat my chances of ever being able to tie my shoes without direct supervision would be slim or none. Pretty

much have to give this phase of testing a "Thumbs Up."

My only suggestion to Mr. Becker, ya might want to add a chin strap, it took almost an hour to find the helmet and another 15 minutes to get it off the neighbor's roof. As it turns out, that Harley's got one hell of a natural swing.

The next week (after a semi recovery and eight pounds of Advil) I decided to resume testing. At this point I figured the worst was behind me and the rest of the testing could proceed without too much sacrifice on my physical behalf. I was intent that in no way would a ball bat and a ladder be involved and they readily agreed (although I was a little more than suspicious when I heard about the large "C" clamp). If you have ever had one of those headaches that make you feel like a pair of rhinos were backing into each other with your skull as the thrill zone for them, you might have some idea as to what happened next. Well, the helmet came through with flying colors once again but as a result of this test all my other hats are much too big for me now.

Hey I never said that I have a degree in rocket science, but by now I was starting to wonder if I should design my own tests without the assistance of my loving Daughter and my best bud Harley. I discussed the possibility of maybe the next bit of testing involving something a little less drastic, like maybe The "Stain Resistance" test. Sounds like a plan to me. The smiles on their faces did seem to have a slightly unnerving effect on me, but maybe it is just the headaches and blurred vision getting to me.

Harley has a brother in the pool cleaning business and they use this stuff called Muratic Acid for washing the walls of concrete pools.

At this writing I have to hand it to Phil Becker, One hell of a hardhat but its resistance to chemical burns leaves a little something to be desired. I guess the permanent six inch part going sideways across my head might have an air of sophistication to it... at least that is what my daughter and Harley keep telling me.

If you have a need for either the Hardhat or Stuffed bear (personally I would strongly advise the bear) give the good folks at eSoft a call or drop them a line at: e-Soft, Inc.

15200 E. Girard Ave.
Suite 3000
Aurora, Co 80014
(303) 699-6565 Voice

WOMEN WHO SYSOP TOO MUCH AND THE CALLERS THEY LOVE

by Brian Gallagher

While it may be true that women are very much a minority online, it is not true that there aren't any female BBS operators. There always have been, a good example, Brenda Donovan. Donovan began her online travels in 1984 with CompuServe, quickly became disenchanted with the cost and moved on to the local BBS scene where she has become a force in her own right. On



February 3, 1989, Donovan opened up her own board, Pacific Rim Information, (619)278-7361, making her one of the longest running female sysops around, hence it is fitting that she brings us this month's list of 252 female sysops from all over the world.

Donovan didn't start keeping the list until the 1993 ONE BBSCON show when, at the encouragement of Jack Rickard, publisher/editor of Boardwatch Magazine, who said he would like a list of female sysops and couldn't find anyone better qualified to keep one than herself, she began doing just that. By the time the show was over, she already had 50 boards signed up.

After the show, building the list came largely through a private FidoNet echo titled: **FEMALE_SYSOPS**, with moderator Cyndi Collins. The 252 BBSs you see printed here is not completely representative of the scope of women sysops out there, Donovan said, "I could easily double this list in another month or two." The reason she hasn't isn't because of lack of information, it is the time involved in entering all of the information into the list. But, rest assured, she promises to assiduously keep at the task until it is completed, and she has no plans to abandon the female sysop list - ever.

"I think there's a lot more of us out there than people think," she said of female sysops, and she thinks "it's great." At last year's ONE BBSCON show, Donovan chaired the Women Online session and was delighted that it was attended by a full house. The session, which was held on the first day of the show, had two more "Birds of a Feather" follow-up impromptu sessions over the next two days. Much of what was discussed involved how women felt about being online.

The biggest obstacle for women online, Donovan said, is harassment from those who frequent the adult boards and chat areas. "The rest of us who don't deal in that realm," she said, "don't seem to have any problem." Donovan will again chair this year's Women Online session at ONE BBSCON in Atlanta from August 17 - 21, and she again expects it to be packed. For attendees, she can also be found in booths 153 and 155 working with James

Smith of Online Communications, Inc. with the company's Front Door e-mail system.

Donovan's qualifications to be chairperson for the Women Online session are substantial. Her degree in mathematics/physics and her MBA aside, this is one lady who knows her computers inside and out. A regular attendee at all cyber conventions, she has run her own consulting business, Donovan Enterprises, since 1983. The business has two main services, the first is as a local quality assurance engineer working primarily for defense contractors, a job she has held with numerous companies in the past. The second, is titled Micro Computer Systems and deals with all facets of PC computing.

When working with Micro Computer Systems she specializes in custom computer building, (she doesn't do Macs), hardware and software compatibility and configuration. She also sells modems through Donovan Enterprises and to her knowledge is the only authorized ZyXEL sysop dealer outside of the company; she also carries U.S. Robotics and other modem brands all of which can be purchased through her board. Keeping her particularly busy with this side of her endeavors is the set up and installation of computer bulletin boards.

She has installed a Major BBS for horse racing bettors, and four or five Wildcat! systems for various uses including one for a prep school in Tijuana, Mexico. Moving BBSs south of the border is one of Donovan's more recent goals as she has just finished installing the La Connexion Mexicana BBS, 52- 66-26-1131, also in Tijuana with the Fido address, 4:971/9, running Remote Access software.

The La Connexion, run by sysop Felipe Bartel is a free system which will be tied directly to the Internet along with Donovan's Pacific Rim, Al Bruner's The SW/SE Connection, (317)640-8267 of Anderson, Indiana, and Steve Froeschke's (pronounced Frisky) E&S Systems BBS, (619)278-8267 of San Diego, California. Froeschke's E&S, with Internet address cg57.esnet.com, is currently an Internet host on its own, but by combining with the other systems, (a target date has been set for late September), the foursome hope to have "...something bigger than just a host," Donovan said. When the new company is formed the Internet site they can be found on will be: thenet.com.

For the Pacific Rim, Donovan runs Mustang's Wildcat! and has done so since the beginning. It is set up on three computers tied to three more computers running under a Novell LAN. The BBS machines each have their own specific duties. One machine is a major echo mail hub (18 hubs) and a file bone. The second machine she uses to log on to her board with, and the third machine deals exclusively with UNIX operations.

Currently the Pacific Rim carries some 30 or 40 newsgroups as well as e-mail. The newsgroups she does carry are not necessarily the most popular, she said, "lots of them are for me." But, if there is a subscriber who wants a particular newsgroup she'll ask for it.

An area of her board that is particularly well stocked is that of recovery. In fact the recovery echo was the first echo she carried and she continues to carry all recovery information she can find. It's been 19 years and 3 months since she had a drop, she said, (April 3, 1975), and "life's been wonderful ever since."

Not surprisingly an area of expertise on her board is technical support, and in addition to the finely honed skills of Donovan, callers can rely on the talents and knowledge of co-sysop Paul Adams,

a certified Novell engineer. The file areas on her board are all shareware and there are no adult files. A good portion of her subscribers are senior citizens who, along with students, she offers a special subscription deal to.

Standard subscriptions are **\$30** for six months, or **\$50** for a year. For senior citizens and students the discounted rate is **\$20** for six months, or **\$35** for a year - all subscriptions include full access to all the features and areas the board offers.

To get your BBS listed on the female sysops list, you must be female, have a BBS, and have some knowledge about the hardware and software that makes a BBS tick. If you fulfill these criteria call the Pacific Rim with the information, e-mail Donovan at: brendad@denet.esnet.com, or snail mail her: Donovan Enterprises, attn:Brenda Donovan, 4303 Genesee Avenue, STE 224, San Diego, CA 92117. Or contact Cyndi Collins at the Log Inn BBS of Bloomfield, New York, (716)657-7660 or through FidoNet, 1:2613/505. For those

wanting a copy of the list it will be available through a door on her system by the time this goes to print. If for one reason or another an individual is having trouble connecting, she will send a copy of the list to all who send a self addressed stamped envelope to the above address.

SERVICE	PHONE	SYSOP	LOCATION
Schizophrenia]]	204-233-0227	Emily Curry	Winnipeg, Manitoba, CAN
Mer Azure Presse BBS	203-333-0223	Yvonne Marie Boots	New Haven, CT, USA
Pleasure Palace III	203-365-0511	Nancy Vaine	Bridgeport, CT, USA
The Whistler BBS	205-238-4327	Kathy Rockholz	Anniston, AL, USA
Batteries Included	205-264-8000	Linda Cummings	Montgomery, AL, USA
Wild Rose	206-545-9455	Gena Merritt	Bellevue, WA, USA
The Trapezium	209-239-4973	Rita Smith	Manteca, CA, USA
TurboCity	209-599-7435	Pam Lagier	Ripon, CA, USA
Main Complex BBS	210-658-8009	Donna Murrell	Universal City, TX, USA
Fingers Talk	214-824-4269	Ann Stalnaker	Dallas, TX, USA
Dog Fanciers BBS	214-620-7131	Kathleen Weaver	Dallas, TX, USA
Honey Board	301-933-1655	Heather James	Laurel, MD, USA
The Colorado Connection	303-940-7357	Terry Rune	Arvada, CO, USA
Ramblin' Roots	305-221-1571	Barbara O'Keefe	Miami, FL, USA
Sunshine PCBoard	305-432-2223	Michele Stewart	Pembroke Pines, FL, USA
Seed of Abraham	305-437-9848	Linda Abraham	Pembroke Pines, FL, USA
Misty Moonlight BBS	305-473-2314	Sherry Levine	Davie, FL, USA
Serendipity	305-480-6047	Debbie Hazelton	Deerfield Beach, FL, USA
The Upper Reaches	305-561-8894	Beth Baldwin	Fort Lauderdale, FL, USA
Daybreak Mail System	305-771-0041	Sonya Whitaker-Quandt	Fort Lauderdale, FL, USA
SOX! The SysOp eXchange	305-821-3317	Ronnie Toth	Hialeah, FL, USA
Unique Connections	305-963-0151	Katrina Dezern	Fort Lauderdale, FL, USA
The N.E.A.T Suite	307-472-4918	Michele Siedenburg	Casper, WY, USA
The Bearly Bored	314-581-6717	Linda Glover	Mexico, MO, USA
The Education Station	619-679-6776	Donna Ransdell	Poway, CA, USA
My Secret Garden BBS	318-865-4503	Patty Morris	Shreveport, LA, USA
Lighthouse BBS	319-366-1985	Marge Robbins	Cedar Rapids, IA, USA
The Bubbling BBS	405-482-9146	Cindi Magnusson	Altus AFB, OK, USA
The Tiger's Lair	405-324-6026	Diana Mullin	Yukon, OK, USA
The Web	405-350-7762	Joyce Jordan	Yukon, OK, USA
Act Locally	405-447-0503	Linda Chapman	Norman, OK, USA
National Rehab Clearinghouse	405-624-3156	Jo Kahn	Stillwater, OK, USA
The WildSide	405-672-5538	Sharon Brown	Del City, OK, USA
Beggar's Forum	405-685-5558	Deanna Luke	Oklahoma City, OK, USA
TradeWinds	405-728-2061	Mona Shaver	Oklahoma City, OK, USA
The Teacher's Pet	405-728-8228	Judy Sneed	Oklahoma City, OK, USA
Synergy	405-942-4845	Mary Link	Oklahoma City, OK, USA
Auntie Yokm's	405-947-0446	Jo Harris	Oklahoma City, OK, USA
The CoCo Zone	407-798-2972	Shirley Hein	Oklahoma City, OK, USA
Central GIG	409-268-1181	Rhoda Segur	Loxahatchee, FL, USA
The Hiding Place	409-272-1152	Ruth Grove	Bryan, TX, USA
Wizard's Domain	409-727-0887	Ilene Hebert	Deanville, TX, USA
The SPA	413-535-1063	Linda McCarthy	Nederland, TX, USA
Physics Forum	413-545-4453	Helen Sternheim	Chicopee, MA, USA
Fun University Network	415-327-4591	Wendie Bernstein-Lash	Amherst, MA, USA
Vote Demo BBS	415-493-8683	Marilyn Davis	Menlo Park, CA, USA
Mover Mouse BBS	415-898-2644	Diane Smith	Palo Alto, CA, USA
Antarctica	501-784-9078	Dawn Harvey	Novato, CA, USA
Interludes! BBS	501-791-2996	Lisa Hastings	Fort Smith, AR, USA
Wilson High K12Net	503-280-5644	Janet Murray	Little Rock, AR, USA
Com-Dat II	503-681-8324	Sue Matthews	Portland, OR, USA
Emerald BBS	503-741-8174	Denise Orton	Hillsboro, OR, USA
Resource Access Program	504-897-9204	Lyla Thomas	Springfield, OR, USA
Construction Net #6	505-662-0659	Pam Trexler	New Orleans, LA, USA
TC-Trader	508-840-8017	Cheryl Buzzell	Los Alamos, NM, USA
Camphor Fountain	510-547-5741	Linda Martin	Leominster, MA, USA
Rhinoceros Kitchen	510-658-4655	Violet Stymacks	Oakland, CA, USA
Not Ready For Prime Time	512-576-3893	Katherine Schroeder	Oakland, CA, USA
Finish Line	512-832-1764	June Parchman	Victoria, TX, USA
Federation BBS	603-889-0283	Donna Marshall	Austin, TX, USA
MaxBoard	603-786-2349	Laurianne Olcott	Nashua, NH, USA
MJ's Place	603-894-4330	Marijane Currier	Rumney, NH, USA
Kitty City	614-456-6448	Jennifer Murphy	Derry, NH, USA
Transfer Station	615-297-5611	Deborah Hutchinson	New Boston, OH, USA
Software Circus	615-331-0594	Becky Ferguson	Nashville, TN, USA
Promises...A Recovery BBS	615-385-9421	Marge Clark	Antioch, TN, USA
Aces High	615-885-5876	Ann DuPrie	Nashville, TN, USA
Music City Archives	615-952-2245	Foxy Ferguson	Hermitage, TN, USA
The Programmers Workshop	619-284-0799	Toni Clark	Kingston Springs, TN, USA
			San Diego, CA, USA

Stephanie's Playhouse 619-569-8788
 Late Nite W.N.Y. 716-895-0587
 Shenk's Express 619-697-8873
 Crystal Quill 703-241-7100
 Struppi's BBS 703-478-9380
 Potters House 706-637-9276
 Pacific Rim Information 619-278-7361
 The Lambda Zone BBS 708-298-7155
 Rivan Warrior 713-324-3302
 Database Connections 713-495-4196
 A Womyn's Line BBS 713-647-9059
 City of the Ancients 713-664-6824
 The Platinum RBBS 713-667-4215
 TRACE! 713-862-6400
 Muggsy's Place 716-352-9694
 Jenny's CAT House 716-482-4134
 Dan and Bob's BBS 716-548-7343
 Log Inn 716-657-7660
 Random Lunacy 801-221-0928
 The Agency BBS 803-821-2745
 The Medical Forum 803-824-0317
 The Time Machine 804-599-6401
 Jammie Party 804-851-1384
 Crickets Corner 806-745-8609
 PeaceKauai 808-338-9999
 Enchanted Garden 808-423-9852
 The Citadale BBS 813-368-6895
 Byte Size Bits 813-675-8812
 Crystal Palace 817-370-9591
 The Recovery Corner 817-447-1619
 Blazin' Bytes BBS 818-776-2792
 The Mermaid's Point 901-365-6410
 Cyteen Station 901-683-9964
 Queen of Hearts 904-789-6843
 The Club House TBBS 908-272-2073
 The Dart Board 912-673-7431
 Metropolis 913-832-0041
 Blue Bayou BBS 918-275-4406
 The Sanctuary BBS 919-227-1677
 Chatlink 618-452-3182
 Rivendell BBS 904-573-9224
 Cyberia 717-840-1444
 Computer Hut BBS 501-329-0321
 The Electronic Pen BBS 201-767-6337
 CYGNUS 305-437-1284
 Boca Bytes 305-421-3198
 Miami Triangle 305-867-8661
 Face to the Wind 305-270-2489
 Flowers BBS 305-557-7793
 Vesuvius at Home 305-252-9415
 Tranquility 210-699-1710
 Shofer BBS 714-838-3837
 IBM World II 401-397-5146
 QUACKERS 216-252-0743
 Camelot 614-423-0185
 Catseye BBS 807-623-5048
 XBM BBS 508-586-6977
 Sherwood Forest 318-479-2016
 Hot & Sassie BBS 918-258-4720
 Native Spirit BBS 918-438-6532
 Night City 918-582-3930
 Over the Rainbow BBS 918-321-6129
 Comm-Net Central 512-244-9753
 Asylum BBS 808-456-8541
 Cody Zoo 716-288-4521
 Abstract BBS 918-250-0078
 Solatium BBS 512-575-1585
 Mystical Palace BBS 512-573-9385
 The Party Line BBS 707-588-8055
 Vegas Chats! 702-898-2428
 Interactions BBS 510-832-0560
 The Home Exchange Network 407-869-5956
 Exit Stage Left 618-236-0571
 Polka Dot Palace 201-829-8480
 ChildSearch Online 707-253-2149
 9-1-1 BBS 619-669-0385
 Kat(h)'s Meow 603-881-9741
 Cape Retreat 603-672-8123
 The Purple Shamrock 603-598-8727
 Snowbound! 603-253-4256
 Aladdin's Palace 604-370-1039
 The PC UG Line 203-877-5520
 Wit's End 716-288-1474
 Renee's Place 604-599-3885
 Women's WIRE 800-210-9999
 Market Space 404-998-7505
 Back Alley BBS 204-269-7604
 Northern Lights 204-477-0010
 Twilight Exchange 204-878-9614
 Zenadome 204-255-0652
 HIV/AIDS Info BBS 714-248-2836
 The AirShow 904-347-5143

Stephanie Anderson
 Marlina Maloney
 Carol Shenkenberger
 Pamela Crystal
 Carol Carmichael
 Nancy Powers
 Brenda Donovan
 Toby Schreiber
 Terry Shermer
 Vicki Surratt
 Anne Mayes
 Arlene Ogden
 Marilyn Barone
 Susan King
 Marge Murphy
 Jenny Morrill
 Vikki Clayton
 Cyndi Collins
 Fen Eatough
 Jennifer Credle
 Shelley Crawford
 Bettie Dendekker
 Veronica Maynard
 Donna Elam
 Liz Hahn-Morin
 PJ Estes
 Linda Carter
 Jean Prophet
 Lisa Mashburn
 Barb Murphy
 Barbara Mallut
 Karen Richmond
 Susan Murray
 Lee Noga
 Mary Vogel
 Karen Maynor
 MaryAnn Martin
 Lynn Beasley
 Dawn Poole
 Cathie Castillo
 Lisa Pellegrino
 Sara Viener
 Angie Harris
 Maria Langer
 Bonnie Lind
 Debbie Lynch
 Shelly Shelton
 Karen Isberg
 Laura Hernandez
 Georgina Martinez
 Shannon Blackburn
 Shoshona Bieman
 Marcy Crossman
 Sharon McCormick
 Beth Kloes
 Cindy Long
 Glenda Stocks
 Tish Ecker
 Dorinda Martineau
 Donna Willhoite
 Carolyn McComas
 Micki Morrison
 Teri Chesser
 Suzy Mehlhorn
 Jean Cody
 Lori Harbaugh
 Bianca Bickford
 Patricia Bastian
 Jami Chism
 Denyce
 Cia Watson
 Linda Allen
 Heather Uchitil
 Lisa Rodriguez
 Beckie Pack
 Marj Mills
 Kath Kirby
 Becky Sherman
 Christine Seveins
 Cyndie Leonard
 Alise South
 Tracy Molitor
 Beth Hatch-Alleyne
 Renee Pocuca
 Phyllis Gardner
 Jean Rearick
 Heather Fraser
 Linda Dunn
 Nicole St. Hilaire
 Margaret Watson
 Sister Mary Elizabeth
 Carol Rex

San Diego, CA, USA
 Buffalo, NY, USA
 La Mesa, CA, USA
 Washington, DC, USA
 Herndon, VA, USA
 Hogansville, GA, USA
 San Diego, CA, USA
 Des Plaines, FL, USA
 Huffman, TX, USA
 Houston, TX, USA
 Houston, TX, USA
 Houston, TX, USA
 Houston, TX, USA
 Houston, TX, USA
 Spencerport, NY, USA
 Rochester, NY, USA
 Byron, NY, USA
 Bloomfield, NY, USA
 Orem, UT, USA
 Ladson, SC, USA
 Goose Creek, SC, USA
 Newport News, VA, USA
 Hampton, VA, USA
 Lubbock, TX, USA
 Kauai, HI, USA
 Hickham AFB, HI, USA
 LeHigh Acres, FL, USA
 La Belle, FL, USA
 Fort Worth, TX, USA
 Burleson, TX, USA
 Van Nuys, CA, USA
 Memphis, TN, USA
 Memphis, TN, USA
 Deltona, FL, USA
 Cranford, NJ, USA
 St Marys, GA, USA
 Lawrence, KS, USA
 Talala, OK, USA
 Graham, NC, USA
 Granite City, IL, USA
 Jacksonville, FL, USA
 York, PA, USA
 Conway, AR, USA
 Harrington Park, NJ, USA
 Pembroke Pines, FL, USA
 Boca Raton, FL, USA
 Miami, FL, USA
 Miami, FL, USA
 Hialeah, FL, USA
 Miami, FL, USA
 San Antonio, TX, USA
 Tustin, CA, USA
 Coventry, RI, USA
 Cleveland, OH, USA
 Belpre, OH, USA
 Thunder Bay, ON, CAN
 Brockton, MA, USA
 Lake Charles, LA, USA
 Broken Arrow, OK, USA
 Tulsa, OK, USA
 Tulsa, OK, USA
 Kiefer, OK, USA
 Round Rock, TX, USA
 Pearl City, HI, USA
 Rochester, NY, USA
 Broken Arrow, OK, USA
 Victoria, TX, USA
 Victoria, TX, USA
 Santa Rosa, CA, USA
 Las Vegas, NV, USA
 Oakland, CA, USA
 Orlando, FL, USA
 Belleville, IL, USA
 Morris Township, NJ, USA
 Napa, CA, USA
 Jamul, CA, USA
 Nashua, NH, USA
 Brookline, NH, USA
 Nashua, NH, USA
 Center Harbor, NH, USA
 Victoria, BC, BC
 Milford, CT, USA
 Rochester, NY, USA
 Surrey, BC, BC
 San Francisco, CA, USA
 Roswell, GA, USA
 Winnipeg, Manitoba, CAN
 Winnipeg, Manitoba, CAN
 Winnipeg, Manitoba, CAN
 Winnipeg, Manitoba, CAN
 San Juan., Capistrano CA
 Ocala, FL, USA

Way Out Wild!	203-723-9430	Jill Yasgar	Beacon Falls, CT, USA
The Night Owl	203-888-3690	Cheryl Willis	Oxford, CT, USA
DisNet	518-462-6134	Maureen O'Brien	Albany, NY, USA
The CyberSurf Board	904-654-0101	Penny Panos-King	Crystal River, FL, USA
TSW Online Information Service	907-372-1624	Lori Martin	Eielson AFB, AK, USA
Lair of the Tigeress	904-473-9472	Sharyn Noakes	Keystone Heights, FL, USA
Metchosin Central BBS	604-478-7678	Jessica Veinot	Victoria, B.C.
Two Babes On-Line	206-885-4236	Liz Du Bois	Redmond, WA, USA
Conceptual CAD Design	602-820-7861	Alex(andra)	Tempe, AZ, USA
Soap Suds BBS	314-771-7954	Barbara Niehoff	St. Louis, MO, USA
The SKATEboard BBS	508-788-1603	Perry Lowell	Framingham, MA, USA
The Alaska Pirate Society BBS	907-562-9364	Patti Johnson	Anchorage, AK, USA
Steel Heart BBS	907-428-3160	Diane Coomer	Fort Richardson, AK, USA
Di's Online Cafe	205-661-8945	Diane Summers	Mobile, AL, USA
The Mother Board	619-420-1702	Coyote Moon	Chula Vista, CA, USA
The Motherboard	707-778-8841	Julie Bueg	Petaluma, CA, USA
The Kountry Kitchen BBS	912-673-6564	Vicki Phillips	St. Mary's, GA, USA
The Butterfly BBS	201-523-1162	Carole Capuano	Paterson, NJ, USA
The Crystal Cave BBS	604-752-2914	Ada Willis	Vancouver Island, B.C.
The Brick Centre BBS	+61-51-46-0797	Elaine Ralph	Loch Sport, Victoria, AUST
Xpress Support Center BBS	305-248-7815	Andrea Santos	Leisure City, FL, USA
Serendipity	403-251-0388	Barbara Burgess	Calgary, Alberta, Canada
Salata BBS	310-543-0439	Karen Mintzias	Redondo Beach, CA, USA
Pee Dee Mail Hub	803-383-4666	Neysa Dormish	Hartsville, SC, USA
Purple Hawk's Den	718-547-5205	Fran Clodomar	Bronx, NY, USA
Crystal Cavern	206-883-8477	Sue Crocker	Redmond, WA, USA
Generations BBS	403-251-5540	Kathi Crockett	Calgary, Alberta, Canada
Killarney Narrows	304-523-8643	Veronica Mayes	Huntingdon, VA, USA
One Byte	203-444-1597	Steph Rothgeb	Quaker Hill, CT, USA
Dragon Weyr	804-737-2021	Sharon Moore	Highland Springs, VA, USA
The Skeleton Closet BBS	804-671-8547	Debby McKay	Virginia Beach, VA, USA
Bear Necessity BBS	+61-02-73-1501	Denise Altoff	Tasmania, Australia
AmericaNews	412-381-6285	Jean Blevins	Pittsburgh, PA, USA
LadyDi's	412-856-0784	Diane Bonifati	Trafford, PA, USA
Time Starts Now	817-332-5336	Dale Hopkins	Fort Worth, TX, USA
Bear Necessities	512-451-7622	Jacci Howard Bear	Austin, TX, USA
Hireath BBS	+61-2-623-4835	Julia Phillips	Sydney, NSW, Australia
Bits N' Bytes BBS	207-873-1937	Anne Arnold	Winslow, ME, USA
In Through The Out Door!	317-282-6862	Lori Smith	Muncie, IN, USA
The Temple of Rock	+81-6117-45-5290	Katie Gochnour	Foster, Okinawa, Japan
Humanity BBS	213-936-6009	Valarie Knight	Los Angeles, CA, USA
The Crusader BBS	213-665-4256	Jackie Farmer	Los Angeles CA, USA
0x0 Republik	714-530-5442	Opal Sullen	Garden Grove, CA, USA
The Motherboard	805-581-5019	Celeste Clark	Simi Valley, CA, USA
Pet Pride BBS	805-945-2590	Ruth Argust	Lancaster, CA, USA
Dolphins' Playground	714-858-1979	Dawn Marcova	Santa Margarita, CA, USA
Tigers Den	714-530-2554	Jazmyn Concolor	Garden Grove, CA, USA
Modem Magick	619-447-5281	Irena Schlossnagel	El Cajon, CA, USA
Homecrafter's Workshop	619-541-2084	Barbara Roach	San Diego, CA, USA
Point of Intercept	619-268-1259	Donna Lee	San Diego, CA, USA
Patti's Closet	619-278-5044	Patti Bader	San Diego, CA, USA
Pandora's Box	209-239-3752	Debbie Finl	Manteca, CA, USA
Deanna's StarBBS	209-239-0883	Diana Kirksey	Manteca, CA, USA
SERENITY IS YOSEMITE	209-742-6488	Carol Katz	Mariposa, CA, USA
Turn On To Teens	209-292-6403	Faye Johnson	Fresno, CA, USA
The Brass Monkey	209-431-5909	Amy Funderburg	Fresno, CA, USA
Veronica's VVV BBS	209-432-8687	Donna Hansen	Fresno, CA, USA
Deep In The Heart	409-775-5552	Sheryl Allen	College Station, TX, USA
Cozy Cafe	318-989-9148	Roxanne Hymel	Duson, LA, USA
Crickets Corner	806-745-8609	Donna Elam	Lubbock, TX, USA
Wizard's Domain	409-727-0887	Ilene Hebert	Nederland, TX, USA
Classroom Earth	517-797-2737	Kendra Yahrmak	Saginaw, MI, USA
Benden Weyr	519-582-0557	Barbara Coates	Delhi, OH, USA
The Kommon Room	905-522-6896	Kate Andrus	Hamilton, OH, USA
Nurses Station	606-932-6108	Sheila Rudd	South Shore, KY, USA
Insane Asylum	502-769-3790	Sherry Rock	Rineyville, KY, USA
Electronic Mafia	502-361-4225	Carolyn Johnson	Louisville, KY, USA
Vickie's Palace	517-589-5954	Vickie Church	Leslie, MI, USA
Rosie's II	608-784-3804	Rose Campbell	La Crosse, WI, USA
OS/2 Zone	606-887-2277	Donna Crisp	Lexington, KY, USA
Candi Land BBS	313-243-6689	Paula Pautler	Monroe, MI, USA
Houses Of The Holy	902-436-2146	Paula Mullen	Prince Ed. IS., Nova Scotia
The Cat's Whisker	416-975-1813	Monica Becker	Toronto, ON, Canada
Stained Glass Windows	416-368-9955	Loralie Freeman	Toronto, ON, Canada
Bonehead's Paradise BBS	902-883-1034	Linda Davis	Elmsdale, Nova Scotia
White Lightening	902-435-9684	Nancy Shaw	Dartmouth, Nova Scotia
Scorpio Rising III	703-620-2827	Virginia Harlow	Reston, VA, USA
The BUG BBS	301-805-3873	Dot Hage	Lanham, MDUSA
The Night Owl BBS	602-456-2926	Janel Burson	Huachuca City, AZ, USA
The Cyber Cafe	505-382-0258	Tamara Hodge	Las Cruces, NM, USA
CCSD BBS	307-682-3320	Denese Wierzbicki	Gillette, WY, USA
Excalibur BBS	508-798-6969	Marianne Lorion	Shrewsbury, MA, USA
Enchanted BBS	413-442-0139	Sharon Berry	Pittsfield, MA, USA
Windham Southwest	802-368-2327	Barb Ackeman	Halifax, VT, USA
Rose Garden	203-253-9256	Laura Kittell	Enfield, CT, USA
Midnight Special BBS	207-439-7919	Elizabeth Bachman	Kittery, ME, USA
The Lighthouse BBS	207-562-8517	Sharon Parker	Dixfield, ME, USA
Divinity BBS	207-490-5844	Terri Lehoux	Springfield, ME, USA
Longview On-Line Node 1	206-577-7358	Jeanne Lejon	Longview,, WA, USA
Dreamers Delight BBS	612-632-4513	Karen Rourke	Little Falls, MN, USA
Just For Fun	406-452-6552	Michele Moss	Great Falls, MT, USA

LOOKING FOR WORK IN ALL THE RIGHT PLACES

by Brian Gallagher

Listening to Sandhya Dave' talk about her Career Connections BBS, (417)917-2127, you would think that she did the whole thing just to help people out and to save trees - and as a matter of fact she did, but Career Connections is also



**Sandhya Dave' of Career
Connections BBS**

becoming a very important tool for some very important customers.

The TBBS-based board, opened in June of 1993 with eight lines and today sports 32 Internet ports you can telnet to at **CAREER.COM**, and sixteen 14.4 kbps modem lines with 28.8 kbps modems now in beta test. In November of 1993, Dave' added Internet access to the system, and she said, "since then it has just exploded." The system, labeled "Heart", provides a database of high tech job openings in the computer, electronics, and engineering fields. Currently there are some 300 jobs available online from companies like Texas Instruments, IBM, Tencor Instruments, and National Semi Conductor.

Geared towards higher education positions with 75 percent of all applicants having at least a bachelor's degree, Dave' said she has observed an individual get a job with a base salary of \$80,000 annually. Since December of 1993 the system has registered 24,388 job candidates, (half are from California), and takes between 500 to 1,000 calls daily.

For those wishing to find employment via this service, they have the option of perusing positions by company, discipline, geography, new graduate positions, or by date (when new positions will become available). Currently the board has positions available in Arizona, California, Indiana, Michigan, North Carolina, New Jersey, New Mexico, Ohio, Oregon, and Texas, as well as a few scattered international positions.

Applicants can create customized resumes online using a format that allows users to cut and paste information and update their resumes as often as they like. The system automatically takes the log-in information, (name, address, telephone number, etc.), and applies it to the resume to save time. All resume information remains confidential.

For corporations, there is a separate interface that allows would-be employers to peruse applicants resumes. After reviewing the resumes corporate head hunters deposit them in different files, depending upon which applies: current interest, future interest and no interest - all available for instantaneous retrieval. In addition employers can create up to four response letters that can be sent to an applicant with a keystroke. When an applicant logs in, the replies will immediately be displayed to them. Also, it is possible for a company wishing to do so, to download all resumes to their existing human resources database, for quick and easy in-house circulation.

Dave', born in Sholapur, India and raised in Bombay, received a degree in physics, with a minor in mathematics from the University of Bombay, and was working on her MBA at the University of New Haven in Connecticut when she discovered the world of computers and just what they could do when applied to the business world. She was so intrigued by the possibilities that she found, "I just didn't want to do physics anymore."

After graduating with her MBA Dave' worked for a local telephone company for a short while before moving to Rochester, Minnesota where her husband was transferred while working with IBM. She spent the next seven years raising her two boys and doing volunteer work - helping families, many of them foreigners, to adjust to life in the United States.

She ended up in Austin, Texas where she did some computer consulting and attended the University of Texas in Austin where she dabbled in still more computer classes. The couple moved to Los Altos, California in 1986 where they reside today.

In California, Dave' worked primarily as a free lance consultant and started her own software support company, Daves Consulting, Inc., in December 1990. During this time she realized the possibilities of a company like Career Connections, thinking that she could place qualified applicants cheaper and more efficiently than an employment agency by doing it online. Wanting to promote the "paperless concept," Dave' filed for the name Career Connections in May of 1992.

From May through December, Dave' researched the various BBS software programs available and finally settled on eSoft's TBBS, because of the flexibility in creating her own menus and ability to "minimize the variables that could possibly go wrong." With the help of eSoft's Karl Glasgow, who Dave' described as "extremely helpful" in setting up her system, Career Connections opened for business six months after settling on the software.

Likewise in configuring her Internet connection later in the year, she found a savior in Holonet's Kurt J. Pires, director of network operations, who helped her a great deal with the configuration of her Internet connection. The system is set up with a Pentium P-90 file server and a DATABILITY VCP 1000 terminal server, linked to a Livingston router processing their T-1 Internet feed.

One of the early corporate customers to the service, Tencor Instruments, Inc., has found it to be quite an asset. Suzanne Gardner, manager of employment for Tencor, said she enjoys the service for finding qualified applicants for positions and "I really believe in eliminating paper."

Gardner added that since Tencor began using the service in mid 1993, the system has been improving all the time, as has the quality, caliber and number of applicants it reaches. Tencor, she said, is all but eliminating the use of outside head hunters and recruiters.

No fees are charged to the applicants as corporate subscribers picking up the tab for advertising their positions. In addition, Dave' said much of the advertising

for Career Connections is done by the corporations who subscribe to the service as a way for potential employees to see all of the positions available in their company.

While difficult to tell how many jobs have actually been filled through the service, (information is confidential to the companies that advertise), Dave' said, no corporation has left the system since using its services, "They absolutely love this tool."

For more information about Career Connections, modem in, telnet in, call voice, (415)903-5800, or write: Career Connections, 4546 El Camino Real, Suite Z, Los Altos, CA 94022.

INFINITE BBSING

by Brian Gallagher

If you can't run with the big dogs, it's best to stay on the porch. **Club Infinity BBS**, (619)726-8878 - WOOF! If bulletin boards were dogs this online service ain't no Chihuahua, it's more along the lines of a St. Bernard, Great Dane, Irish Wolfhound mix - monstrous. What makes this board such a formidable mongrel? A unique mixture of three different software systems - Galacticomm's Major BBS, (the front end or "top" menu), which runs with Durand Communication's photographic database, DCNET, all of this resting atop Clark Development's PCBoard which is the "main" system - a Frankenstein set up if ever there was one.

What this means to the user is a cornucopia of choices. The Major part of the system gives the board good multi-node capabilities; while the PCBoard area gives sysop, Dennis Di Toro, a better file management system and greater flexibility through the PPL programming language, allowing sysops to customize software to particular wants and needs. Durand Communication's photographic database, DC NET V.2.72, is supported on the Major side, and to really appreciate this system and the advanced RIP graphics, I highly recommend downloading "infinity.exe" at login, which is Durand's Genesys terminal program with Infinity's icons added in. The 20 minute download is well worth the wait.

On the top menu you will encounter 21 RIP icons, all operated in the point and click fashion of Windows. If you call this board in ANSI you are doing yourself a



Sysop - Dennis Di Toro

great disservice, the RIP graphics are first rate, and there are two RIP demo shows, (one on each system), that really give you an idea of just what can be done with a little patience and a lot of RIP. Still, for those ANSI aficionados, there is also an ANSI demo that can be viewed.

Speaking of viewing, the wanted persons and missing children icons open up an entire database of information about individuals and also supplies online viewing of pictures of them. Right now there are approximately 65 children in the missing database and 75 desperados in the wanted database, with more to come I am assured. Users can search either database by a number of different factors including, first and last names, physical characteristics, and rewards - if any, for would be bounty hunters. For picture buffs the "Fun" icon reveals over 100 miscellaneous photographs of automobiles, girls, planes, animals, fish, real estate and lots more. Completing the visual array are 23 color weather maps and satellite pictures supplied by Planet Connect, and updated every four hours.

Callers should note that while the display says that up to ten pictures can be displayed at the same time, without substantial memory, it is easy enough to crash your system while downloading an image if you already have some displayed. And, the download times displayed for the pictures are really just ball park figures, usually about half the time it takes to really download the image. Pictures can be resized to the whim of the user by grabbing the lower right hand corner of the image with the cursor and "pulling" or "pushing" the image to the desired size, and can be moved by grabbing the top bar with your cursor and dragging it to where you would like.

For information hounds, digging up data on most anything is only a mouse click away. Di Toro said they compiled information from no less than six sources including USA Today, and categorized the information under the "BULLETINS/NEWS NOW!," "FINANCE AND WALL STREET," "SPORTS LINK!!," "ENTERTAINMENT NEWS! AND REVIEWS" and "MJR PUBS!" icons. The major publications area includes 11 regular publications including: The Sports Collector Monthly, The Weekly High Tech Home Magazine, Profit and Be Your Best to name a few, with a special section called the Monthly Grab Mag which has five articles from five random magazines. At this writing the Grab Mag publications are: OMNI, Woman's Day, Astronomy, Sports Afield, and The Saturday Evening Post.



For still more information the "Federal Documents" icon, gives users a wealth of government documents. The 1994 Federal Budget is available for those wanting to see where it is their tax dollars are supposed to go, accompanied by this week's White House documents, the NAFTA treaty, pending health care bills, the fax numbers of congress persons, and Clinton's itinerary - those looking to fill up a hard disk shouldn't have any trouble here.

For international travelers the "Travel" option offers travel information for those going abroad, including currency exchange rates, non-emergency information for citizens traveling abroad - marriage abroad, marriage to a foreigner, acquisition of U.S. citizenship, international adoption, Romanian adoption and others. Perhaps the most important area here is the "Emergency service for citizens traveling abroad." For this category the text recommends contacting the Citizens Emergency Center, a division of the State Department, at (202)647-5225.

Still haven't got enough? No fear, follow the icon labeled "TO MAIN SYSTEM" (the PC Board half), and welcome yourself to 45 gigabytes of downloadable files and for all intents and purposes another BBS. While some of the information on the second half of the system is repeated such as the News, and USA Today areas, there are also several new features here.

Upon entering the main system, users will be prompted to automatically download several McAfee virus scanners, before they actually get to the main board. Again users will be prompted for ID and password after which the system will inform them if they are lacking any of the latest icon updates. Via the same automatic download as with the virus scanners, with the click of an icon the system will automatically determine which icons are needed, and download those specific to their system. After this users will reach an icon laden screen much the same as the first - only different.

The biggest and arguably the best part of the second half of this mongrel system lies in the file areas and a unique in-house retrieval and downloading system which enables users to view an exploded ZIP file and download a particular file from within the ZIP, rather than the entire thing which may or may not be needed.



Online shopping is another feature on the second half of the system, offering users the opportunity to purchase various gag gifts, adult toys, magazine subscriptions, CDs and videos as well as computer equipment. The system offers 19 different language settings including German, Portuguese, Star Trek and Government - truly some off-beat completely foreign languages to be sure.

Throughout both systems a help icon seems omnipresent, or just a menu away. In addition, for new users not used to the BBS world, an info button at the bottom of the top screen provides valuable information to make modem traveling as pleasant and hassle free as possible.

For now Internet access is surprisingly lacking, but it is not due to lack of effort. Di Toro is working through the bureaucracy of his local telephone company and getting a T-1, X-25s and a possible ISDN connection knotted and gnarled with red tape and meetings, but he has high hopes of having 50 lines up and running by the time this goes to print, and to eventually run **4,000** or **5,000** lines, rivaling the major online services for a fraction of the cost.

This may sound overly ambitious and even naive to many, but, Di Toro is not your average sysop, (if there is such a thing). He is an entrepreneur in every sense of the word. "I take opportunities as they come," he said, "I just grab them." Two years ago he was living in Florida and running a wholesale car dealership with a silent partner. The pair decided that they wanted to pursue something with a better growth poten-

tial, something that was more marketable, and they settled on BBSs because, as Di Toro said, "Technology is easy to sell."

A self described "chance taker" Di Toro began his quest to build one of the biggest BBS systems around from the very beginning. You see, he didn't have any computer experience what so ever when he undertook this project in July of 1992. Through 10 and 12 hour days, seven days a week, he managed to learn DOS, software packages and applications, hardware set-ups and applications, how to configure systems and the gambit of telecomputing in just two years.

By December of 1993 he was beta testing the system and today he boasts over 1,000 paid subscribers some of them international. The system supports five networks including, FidoNet, NaNet, Rhyme, ILink, and PCUSENET, and runs on nine 486 33s and 66s with 56 CD ROMs. Subscriptions run on a credit system with 3600 credits running 75 cents, with the average caller using 60 credits per second, or about 75 cents an hour. Premium time can run up to 1200 credits per second for adult access and Internet when it is installed.

At this time local access numbers are not provided, but that too may soon change. For more information about Club Infinity, call the board, or write to them via snail mail: Club Infinity BBS, attn: Dennis Di Toro, 3045 Via Del Cielo, Fallbrook, CA 92088.

DIGITAL LOGIC SYSTEMS

by Brian Gallagher

In the online world you are likely to run into all sorts of different people who will be telecommuting for all sorts of different reasons. Some are out there looking for investment opportunities, some just want to know what it's all about, still others find it a viable source of entertainment and social interaction,



Jerry McCarthy and his daughter Lauren

and some people just end up there by necessity and providence. Fitting this last category to a tee, sysops Jerry and Robin McCarthy operating their five line, Digital Logic Systems BBS, (DLS), (303)347-2921.

Jerry's journey to the online world, the Internet and beyond is a rather circuitous route beginning in the Navy where he gained much of the knowledge that would eventually become his career. By taking advantage of the Navy's tuition policy, he attended Memphis State University and received an associates degree in electronics technology. The Navy put him to work as an aircraft electronics technician. His tour ended in November of 1985 and left him in Hawaii where he stayed for three years working for a defense contractor.

Looking for a better quality of life and a lower cost of living led him to Colorado where he initially worked for Automated Business Systems as the support manager for technical support personnel, service technicians, and programmers. While there, Jerry did UNIX consulting in his spare time and found he needed an electronic way to communicate with his clients - where they could download software patches to assist their systems. On July 1, 1992 DLS opened up for business as a private three line BBS running VBBS shareware software.

Shortly after getting the board going, Jerry moved to a new company, Wyse

Technologies, Inc., and a new position as the Sales Engineer for the 19-state Rocky Mountain Region. His new duties focused on marketing larger computer systems such as Windows NT and UNIX. Recognizing a conflict of interest when he saw one, shortly after getting the board going for his private consulting business he began dissolving the private system by divesting his clients - a project which he did not complete until February 1993.

In the mean time, he and Robin decided that since they already had the equipment they might as well go public with the board, and they did. Their first step was deciding which software platform to use as VBBS just wasn't cutting it.

To help the decision making process, Jerry attended the first ONE BBSCON show in 1992, held in Denver. At the show his decision vacillated between CocoNet - because he liked the UNIX and graphics capabilities, and Mustang's Wildcat! which supported Telegrafix's RIP graphics. At the time, CocoNet didn't support ZModem, had limited file libraries, and no system management capabilities, which landed Jerry with Wildcat! he said, "I knew it would be better in the long run."



By the end of November 1992 his board was up and running in beta test. By July of 1993, with free access to all, he had over 200 callers monthly. Looking to improve his system and keep up on the happenings in the BBS realm, he made plans to attend the second ONEBBSCON in Colorado Springs. When the August show date approached, however, he was called away on a business trip and it was his wife, Robin, who attended the conference instead.

Robin, who created all of the RIP screens on the board and previously worked as a technical recruiter, came

back from the show with valuable marketing information. Applying what she had learned from the sessions, the BBS was written up in The Denver Post, a major Denver daily newspaper and a computer magazine. The computer magazine, however, listed the board as being based in Little Rock, Alaska, rather than Littleton, Colorado, flooding their telephone with questions from Alaskans wanting to know how to log on. At the same time the misinformed article was in circulation the board was listed in a local telephone directory as a tanning salon - giving him still more grief as tans still cannot be obtained by phone lines.

In January of 1994, the couple worked out a deal with a New York based company to use the system to keep in touch with approximately 100 Denver based employees. The company transfers e-mail through the system, posts vacation schedules, employee benefits information, company policies and a newsletter.

The pair began charging for access in May of 1994 and have over 150 paid subscribers to date, which Robin adds, is just enough to cover the costs of the phone lines, Internet charges, and

new shareware CD ROMs. For first time callers, they offer a 30 day limited access free trial for those wishing to see what is there. With 450 callers taking advantage of the free trial access monthly, Jerry joked, "Apparently I still have too much free stuff."



And the "stuff" the board carries is what keeps callers coming back. With the help of four co-sysops, Marc Bathgate, Scot Edholm, Nelson Ingersoll, and Jerry Koedam, the board's file areas are well-manicured, and

frequently updated with few if any "dupes." There are no upload/download ratios, and it is mostly the Windows shareware files that get downloaded - almost three to one compared to other files, Robin said. Other strong file areas out of the 110 carried (comprising over 20,000 files) are UNIX, Windows NT, psychic connection, U.F.O.s, and hacking.

Both agree that it was the file areas that first got people calling the system, but the Internet seems to be a big pull these days. The Internet DLS carries at this time is e-mail and over 100 newsgroups, but they are looking to expand that shortly after this year's ONE BBSCON, where Jerry anticipates Mustang Software, Inc., will demonstrate Internet capabilities with the Wildcat! system.

Robin, who watches the board and their first child, seven month old Lauren Ann when Jerry is at work, likes the fact that many parents use e-mail to communicate with their children who are out of state attending college; she also said the game door seems to be a favorite. Her favorite part of the Internet is the misc.kids newsgroup, where she finds information about chicken pox, the symptoms of fifth disease and how to stop your child from hurting themselves when they start crawling - all valuable new-mom information.

She has also observed the emulation that people call in under. She said that while not many callers call in using RIP graphics, once they do - they don't go back to ANSI. Other features of the board are USA Today, an off-line mail door and a time bank feature, allowing callers who don't use all of time they have purchased to stock pile it for a rainy day or transfer it to another user if they wish.

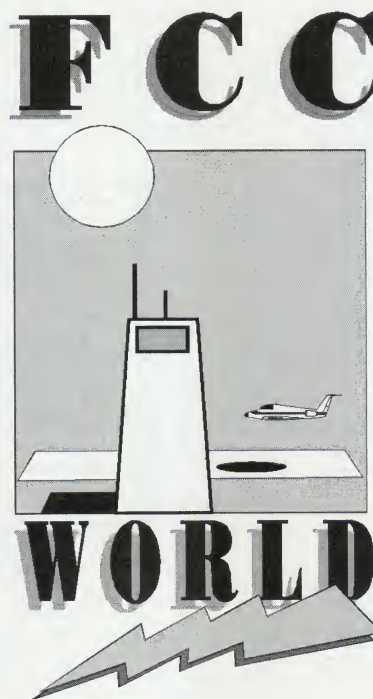
Subscriptions to DLS come in a variety of sizes and shapes. For \$10, users receive a two month full access trial period with one hour per day access time. For \$14.95 per year, those users primarily interested in Internet e-mail and newsgroups, receive 15 minutes per day, long enough to use an off-line mail reader to keep up to date on worldly happenings, and they can also download one file per day. The DLSMEMBER package, comes with a price of \$24.95 per year giving callers full access for one hour per day. A MEMBERPLUS package for \$34.95 is also full access, but tacks on an extra hour of online time for two hours per day.

For more information about DLS, or to subscribe, call the board, send e-mail to: info@dlsinfonet.com, or write to them via snail mail: Digital Logic Systems, attn: Jerry and Robin McCarthy, 7931 S. Broadway, STE 310, Littleton, CO 80122.

FCC WORLD

by Brian Gallagher

Out of some 57,000 BBSs in the United States, a large percent of them duplicate what it is the others are doing but, not always. Carrying no shareware files, no games, no pictures of pretty girls or fast cars is FCC WORLD, (202)887-5718 of Washington, D.C. This board is the epitome of a niche bulletin board stocking only files related to the FCC and the immediate industry affected by FCC policies and court decisions.



The two line board running Galacti-comm's Major BBS software is operated by the law firm Smithwick & Belendiuk, P.C. which, not surprisingly, is a law firm dedicated solely to clients dealing with FCC litigation. The firm was formed in 1988 and utilizes the pair's 35 years combined experience of practicing communications law.

They settled on using Major BBS because they were looking for a system that would be as user friendly as possible as many of their callers are not

what you would call avid BBSers, in fact Belendiuk said, for many of their callers this will be the first and perhaps only board they ever call. The reason for this is the rather specific information carried on the system. "The FCC Daily Digest is only of interest to a certain class of people," he said.

Besides the daily digest, the board carries information concerning the latest Supreme Court rulings dealing with communications law, broadcast actions and public notices, broadcast applications, FCC releases concerning cable, actual FCC forms in PCX graphics format, documents concerning mobile services, common carrier documents, the TELECOM DIGEST, a newsletter from Media Services Group, Inc., and a newsletter from the law firm, as well as a small but growing list of free classified advertising.

In the classified ads, Belendiuk said, you won't find a '67 Chevy here, but a '67 three kilowatt Harris transmitter - "you're right on." No kidding, looking through the four or five classified ads on the system reveals that for a cool \$250,000 you too can be the proud owner of an AM/FM radio station in Clarksburg, West Virginia; or for a reporter in search of a job who knows something about communications technology, there is a position available in Alexandria, Virginia.

The board opened up for business in late May and has already fielded over 1,000 calls. The majority of advertising about the board came through word of mouth, some local trade magazines who did stories about the system and an Internet posting. The caller base is spread throughout the 50 states and the Virgin Islands.

The board was set up as a means for disseminating FCC information quickly and efficiently and to offer a forum for discussion to those interested. "The purpose isn't to get clients," Belendiuk said, "It's more of a service or a name enhancer for us." He adds that most of the callers who browse through the 500 files currently available on this free service are other communications lawyers.

For more information about FCC WORLD call the board, their voice line: (202)785-2800, or write: FCC WORLD, attn: Smithwick & Belendiuk, P.C., 1990 M Street, NW, STE 510, Washington D.C. 20036.

INTERNET UUCP Host List

BBN Technology Services NEARnet 10 Moulton Street Cambridge, MA 02138 Voice# (617)873-8730 Fax# (617)873-5620 (internet) nearnet-join@nic.near.net	\$2,890 year \$1,000 registration fee	IDS World Network 3 Franklin Rd East Greenwich, RI 02818 Voice# (401)885-6855 Fax# N/A (internet) info@ids.com	\$15 month \$80 6 months \$150 year
CICNet 2901 Hubbard Street Ann Arbor, MI 48109 Voice# (313)998-6103 Fax# (313)998-6105 (internet) info@cic.net	\$35 month \$2.50 hour prime time \$2 hour non prime time \$175 registration	IMS Intercom 6418 Symposium Clinton, MD 20735 Voice# (301)856-2706 Fax# (301)856-5974 BBS# (301)856-0817 (internet) led@imssys.com	\$20 month \$30 Connect fee
CL2 global corp. 3390 Spottswood Ave. Memphis, TN 38111 Voice: (901)452-3388 Fax: (901)757-4050 Data: (901)327-8718 e-mail: internet.info@cl2globl.net	\$30 per year plus \$0.10 per message FTP/Telnet \$25.00 month \$1.50 per hour	InfiNet Infinite Systems PO Box 02138 Columbus, OH 43202 Voice# (614)268-9941 BBS# (614)268-3639 (internet) info@infinet.com	\$15-45 month \$15 month flat rate
Clark Internet Services 10600 Route 108 Ellicott City, MD 21042 Voice# (800)735-2258 Then Give the following # (410)730-9764 Fax# (410)730-9765 Data# (410)730-9786 (internet) info@clark.net	\$30 month \$264 annual \$25 registration	INTAC Access Corporation 256 Braod Ave. Palisades Park, NJ 07650 Voice: (201)944-1417 Fax: (201)944-1434 Data: (201)944-3990 finger info@intac.com	\$50 to activate \$30 month w/o newsfeed \$2.00 hour newsfeed
CNS Internet Express 1155 Kelly Johnson Blvd. Suite 400 Colorado Springs, CO 80920 Voice# (719)592-1240 (800)748-1200 Fax# (719)592-1201 (internet) info@cscns.com	\$10 monthly minimum \$2.75 hour \$8.00 hour 800 service \$35.00 registration	ISLAND NET Victoria, BS Voice# (604)479-7861 BBS# (604)477-5163 (internet) mark@amtsgl.bc.ca	\$2.00 hour \$75.00 setup
Colorado Supernet Colorado School of Mines 1500 Illinois Street Golden, CO 80401 Voice # (303)273-3471 Fax# (303)273-3475 (Internet) info@csn.org	\$3 hour \$40 registration \$15 month minumum	Maestro Technologies 29 John St New York City, NY 10038 Voice# (212)240-9600 BBS# (212)240-9700 (internet) staff@maestro.com	\$100 month \$125 setup
CyberGate, Inc. 662 South Military Trail Deerfield Beach, FL 33442 Voice# (305)428-4283 Fax# (305)428-7977 (Internet) info@gate.net	\$20 month includes 10 hrs \$1 hour above 10 hrs \$50 setup fee	MCSNet 3217 N. Sheffield Chicago, IL 60657 Voice# (312)248-UNIX Fax# (312)248-8649 BBS# (312)248-0900 (internet) info@mcs.com	\$2.00 hour first 5 hours \$1.00 thereafter in a calendar month \$15.00 month minimum charge. \$10.00/setup
Doyle Monroe Consultants 267 Cox Street Hudson, MA 01749 Voice# (508)568-1618 Fax# (508)562-1133 (internet) info@dmc.com	Free Thirty day trial period. Variety of plans starting as low as \$5 a month, wil never exceed \$150 a month	Merit/MichNet 2901 Hubbard Pod G Ann Arbor, MI 48105 Voice# (313)764-9430 Fax# (313)747-3185 (internet) info@merit.edu	\$35 month \$40 registration
DPC Systems 537 Cloverleaf Dr. Monrovia, CA 91016 Voice# (818)305-5733 Fax# (818)305-5735 (internet) connect@dpcsys.com	\$15 Month \$2.00 hour \$25 registration	MIDnet 501 N Tenth Rm 124 Lincoln, NB 68588 Voice# (402)472-8971 Fax# (402)472-8486 (internet) cfarnham@unl.edu	\$60 month \$150 registration
Global Connect 497 Queens Creek Rd Williamsburg, VA 23185 Voice#: (804)229-4484 Fax#: (804)229-6557	\$30 month No setup, no hourly	MRNet 511 11th Ave South Box 212 Minneapolis, MN 55415 Voice# (612)342-2570 Fax# (612)344-1716 (internet) dfazio@mr.net	\$55 month \$150 registration
Holonet 46 Shattuck Square Suite 11 Berkeley, CA 94704 Voice# (510)704-0160 fax# (510)704-8019 (internet) info@holonet.net	\$6 month \$2-4 hour \$50 registration	Neosoft, Inc 3408 Mangum Houston, TX 77092 Voice# (713)684-5969 Fax# (713)684-5922 (internet) info@neosoft.com	\$54.95 per month

INTERNET UUCP Host List

NETCOM
4000 Moorpark Avenue
Suite 209
San Jose, CA 95117
Voice# (408)554-8649
Fax# (408)241-9145
(internet) info@netcom.com

\$25 month low vol e-mail
\$45 month USENET& mail
\$60 month Telnet/FTP
\$50 setup fee

PANIX
Voice# (212)787-6160
(internet) info@panix.com

\$2 hour
\$10 month for a user
account

Pioneer Motherboard
1770 Massachusetts Avenue #273
Cambridge, MA 02140
Voice# (617)646-4800

\$24.95 month
No installation

RAIN
Box 2683
Santa Barbara, CA 93120
Voice# (805)899-8610
fax# (805)568-2299
Data# (805)899-8600
(internet) rain@rain.org

\$50 month
\$200 registration

The Dallas Infomart
1950 Stemmens Freeway
Suite 5001
Dallas, TX 75207
Voice# (214)746-4710
Fax# (214)746-4856
(internet) info@onramp.net

\$79 month
\$75 Registration

The Well
27 Gate 5 Road
Sausalito, CA 94965
Voice# (415)332-4335
Fax# (415)332-1669
(internet) info@well.sf.ca.us

\$35 month
\$1 hour
\$50 registration

UUNET Technologies
3110 fairview park drive
falls Church, VA 22042
Voice# (800)488-6384
fax# (703)204-8001
(internet) info@uunet.uu.net

\$36 month
\$2.60-5.60 hour

VoiceNet/DSC
17 Richard Road
Ivyland, PA 18974
Voice# (215)674-9290
Voice# (800)521-2733
fax# (215)674-9662
(internet) info@voicenet.com

Variety of services
\$35-500 setup
\$5-150 monthly fees

XNet
PO Box 1511
Lisle, IL 60532
Voice# (708)983-6064
BBS# (708)983-6435
(internet) info@xnet.com

\$1 hour
\$5 month minimum

ZONE 1 Network Exchange
Robert Forsythe
5800 Arlington Ave
Riverdale, NY 10471
Voice# (718) 549-8078
Fax# (718) 884-7998
(internet) info@zone.net

Variety of services
\$50-995 start up
\$1-2 hour
\$40-1290 month

Magibox
1873 Hidden Oaks Drive
Memphis, TN 38138
Voice# (901) 757-7835
Fax# (901) 757-5875
(internet) net.info@magicbox.net

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BOARDWATCH

List of BBS List Keepers



This listing comprises a list of those who compile and maintain lists of bulletin boards, either by topical category, or by some geographic area or definition - often by area code. The primary bulletin board system where the list can be downloaded electronically is also included.



BBSLIST TOPIC	AUTHOR/EDITOR	CONTACT BBS	TELEPHONE
Creative Edge BBS	Kevin Brook	Connecticut AC 203	(203)743-4044
Handicap News BBS	Bill McGarry	BBS With Handicapped Focus	(203)926-6168
Generic BBS	Victor Laking	Known Networks	(204)475-5199
Generic BBS	Victor Laking	Manitoba, Canada List AC 204	(204)475-5199
Eskimo North	Bob Dinse/Nanook	Seattle AC 206/West Washington	(206)367-3837
AmoCat BBS	Richard Langsford	Tacoma Washington AC 206	(206)566-1155
Orion Station	Art Tomlin	Puget Sound Area	(206)675-0565
Quicksilver BBS	Michael Schuyler	Kitsap County Washington	(206)780-2011
Street Corner BBS	Scott R. Bodeen	Maine 207	(207)442-0997
Anything Goes	Chris Mitchell, "Gomba"	Modesto, CA BBS List	(209)491-0782
Zen Den Systems	Jack Porter/Madera UG	Central California AC 209	(209)675-8436
The Gooley (GUI) BBS	David Shapiro	Graphical User Interface BBS	(212)876-5885
Downtown BBS	Ken Sukimoto	96 List - 9600+bps BBS	(213)484-0260
Blues Cafe	Mark Elson/Mike Shockley	Dallas/Ft. Worth BBS List	(214)638-1181
LGNP1 (login:BBS)	Phil Eschallier	Open Access UNIX Site List	(215)348-9727
Flip Flop	Jim Barry	Cleveland Area 216	(216)951-9134
KSI Public BBS	Joe McIntosh	Educational BBSs	(219)626-2150
KSI Public BBS	Joe McIntosh	Indiana BBSs	(219)626-2150
Coin of the Realm	D.Wendling/JS Christianso	Conservation/Nature BBS List	(301)585-6697
3WINKs BBS	Stan Staten	Ham/Amateur Radio BBS	(301)590-9629
HEX BBS	Richard Barth	Handicapped Issues BBS	(301)593-7357
Infinite Perspective	Frank Atlee	Desktop Publishing BBS	(301)924-0398
Talk Radio BBS	Vince Boehm/Dave Osburn	Delaware AC 302	(302)429-7667
Big Boy's BBS	Willis Morrow	Colorado AC 303/719	(303)458-3832
The CatEye BBS	Douglas L. Moore II	Cave Exploration BBSs	(304)592-3390
Silicon Beach BBS	Eric Thav	South Florida Area 305/407	(305)474-6512
SOCAL Corner	Mike Hefferman	Southern California	(310)422-7942
Illusions BBS	Jim Walton	California AC 310	(310)804-3324
Tony's Corner	Horst Mann	Detroit Area 313	(313)754-1131
Fire Escape's Dir	Beth Brooks	St. Louis AC 314	(314)741-9505
The RoadHouse BBS	Richard Holler	ASP BBS Member List	(317)784-2147
Computer Plumber	Arthur Petrzeka	Engineering Related BBS	(319)337-6723
Eagle's Nest	Mike Labbe	Rhode Island Area 401	(401)732-5292
T-8000	Stephen Decarie	Alberta AC 403	(403)246-4487
The Quantum BBS	Jeremy Birkett	Calgary Alberta AC 403	(403)252-5119
OASIS	Online Atlanta Society	Atlanta Area 404	(404)627-2662
The INDEX System	Rodney Aloia	Atlanta Area 404	(404)924-8472
Valley Light BBS	Jay Michalik	Montana Area	(406)273-6399
Montana MediaNet	Chad Payne	Searchlight BBS Systems	(406)549-6325
Infinite Space Onlin	Lenny Lacuy	Orlando BBS List AC 407	(407)856-0021
BABBA BBS	Mark Shapiro	San Francisco Bay Area	(408)946-8592
Silver Streak BBS	Brad Blase	Baltimore BBS Area 410	(410)683-0300
Zuul's Catacombs	Chas Stokes	Pittsburgh AC 412	(412)264-9787
Ameriboard	DP McIntire/Beth Spotts	National BBS List	(412)349-6862
The Castle	Mark G.	Miwaukee Area 414	(414)327-5085
Natural Connection	Patrick O'Brien	North America Nudist List	(414)426-2110
Toledo's TBBS	Ryck Zarick	Toledo Ohio Area 419/313	(419)475-2241
The Blue & The Grey	Bob Underdown	Arkansas Area 501	(501)444-8420

BBSLIST TOPIC	AUTHOR/EDITOR	CONTACT BBS	TELEPHONE
DawGone Disgusted	Lisa Gronke	Portland Oregon BBS	(503)297-9145
Southern Star BBS	Jeff Jones	New Orleans BBS List	(504)885-5928
MDC Computers BBS	Dan Kiehl	New Mexico Area Code (505)	(505)434-0258
Software Creations	Dan Linton	Apogee/ID/Software Crtns List	(508)368-7139
ponyXpress BBS	Ruben Melo	PCBoards on Internet	(508)587-7669
Miwok Village BBS	Jim Metzler	Worcester MA AC (508)	(508)754-6512
Treasure Island	James Cordani	Corpus Christi	(512)241-8358
Camel's Back BBS	John Foster	Austin Area BBS List AC 512	(512)243-0077
J&J's BBS	Joseph Caplinger & Son	Selected BBS	(513)236-1229
Long Island Exchange	Harold Stein	AC 516 Free Shareware BBS	(516)271-5303
Wolverine BBS	Rick Rosinski/SAMM	Area Code 517 - Mid-Michigan	(517)695-9952
Delight The Customer	Dennis Hauser	Business/Professional BBS	(517)797-3740
Majestic Royalty BBS	John Mendivil	Phoenix AC (602)	(602)278-1651
Cheese Whiz BBS	Sue Widemark	Phoenix AC (602)	(602)279-0793
The Commo Shack BBS	Kevin McCrory	Cochise County Arizona	(602)452-0587
Island Net	Mark Morley	Victoria/Vancouver AC 604	(604)477-5163
Kentucky Explorer	Jon Hagee	Kentucky AC (606)	(606)271-1451
JW-PC Dataflex.HST	Jim Wargula	Wisconsin 608	(608)837-1923
The Casino BBS	Dave Schubert	New Jersey AC 609	(609)485-2380
Praedo BBS	Wayne R. Morton	New Jersey Area 201/609/908	(609)953-0769
Black Bag	Edward Del Grosso	Medical Issues BBS	(610)454-7396
Abiogenetic BBS	Barry Watson	Minnesota Twin Cities AC 612	(612)774-8454
Way Out	Mike Shecket	Apple II BBS	(614)436-4846
SPDA Info Service	unknown	Tennessee AC 615/901	(615)952-5638
The Pacific Rim	Brenda Donovan	Female Sysops	(619)278-7361
ComputerEdge	Tom Grigg	San Diego, CA AC 619	(619)573-1675
General Alarm	Joe Nicholson	San Diego AC 619	(619)669-0385
pro-sol	Morgan Davis	Apple II BBS with Internet con	(619)670-5379
PC Power House	Eddie Gebhard	Virginia AC 703/804	(703)348-1423
OS2/Shareware BBS	Pete Norloff	OS/2 BBS Systems	(703)385-4325
NGS-CIG	Richard A. Pence	Genealogy Related BBS	(703)528-2612
Moobasi Optics, Ink	Blaine Schmidt	Charlotte, NC AC 704	(704)541-9842
BDPA BAC BBS	Arthur McGee	Indigenous People BBSs	(707)552-3314
BDPA BAC BBS	Arthur "Rambo" McGee	Black Run/Oriented BBS	(707)552-3314
Royal Swedish Viking	Peter Anvin	Chicago	(708)491-9036
Risqilly BBS	Billy Kennedy	Gay & Lesbian BBS List	(708)495-6609
ChicAAgo Hangar	Rex Chadwell	Airline Pilot/JUMPSEAT BBSs	(708)980-1613
Atomic Cafe BBS	David E. Wachenschwanz	Houston Area 713	(713)530-8875
Korea America Online	Wayne Jeong	Korean BBSs	(714)449-9373
Logan's Run	Tracy Logan	Rochester NY AC 716	(716)328-2914
Antarctica BBS	Mario Mueller	RIP BBS Listing	(717)755-2440
Cyberia	Adam Viener	717 AC BBS Listing	(717)840-1444
EarthArt BBS	Bob Chapman	Ecology/Conservation BBS	(803)552-4389
Wildcat! HQ	Jim Harrer	Wildcat! BBS	(805)873-2400
His Board	Larry Honore	Central California Area 805	(805)652-1478
Land's End BBS	Brent Davis	Oahu Hawaii	(808)499-2527
Digicom BBS	Gary Barr	Technical Support BBS List	(812)479-1310
Mercury Opus	Emery Mandel	Pinellas/Tampa Florida AC 813	(813)321-0734
Sound Advice	Roy Timberman	Kansas City Area 816/913	(816)436-4516
Mysteria	Phil Hansford	Occult BBS	(818)353-8891
Night Gallery	John Rigali	Commodore 64/128/Amiga BBS	(818)448-8529
Seventh Dimension	Shawn Berry	Durham Region-Ontario Canada	(905)571-6052
Alaska Pirate Soc.	Patti Johnson	Alaska AC 907	(907)248-9364
AK Information Cache	Robert Southwick	Travel Related BBSs	(907)373-3205
Bob's BBS	Bob Breedlove	Darwin National USBBS List	(916)929-7511
LiveNet 1:170/110	Dave Fisher	OS/2 Related BBS	(918)481-5715
ACCESS AMERICA	Linda Hargraves	Tulsa Oklahoma Area BBS List	(918)747-2542
Micro Message Svc.	Mike Stroud	Raleigh NC Area Code 919	(919)779-6674
Catalyst BBS	Henk Wolsink	Republic of South Africa	27-41-34-1122
The Warehouse BBS	Cesar Keller	Switzerland BBS List	41-1-492-5157

BBS SOFTWARE VENDORS

Product	Company	Voice	FAX	BBS	Platform	LAN	Tele Lines	Multitracker	Fido	Internet	GWk	Other	Chat	Price-MAX	Price-MIN
CNet Pro 3	Perspective Software	313-537-6168	313-537-5942	313-255-2466	Amiga	Unlim	100	OS	Y	I	I	J	Y	\$229.95	\$229.95
CocoNet	Coconut Computing, Inc	619-456-2002		619-456-0815	UNIX	1000	-	OS	Y	I	N	N	Y	\$18,995	\$395
DLG Professional	Telepro Technologies	403-341-7826	403-341-7826	403-347-3262	AMIGA	Unlim	29	OS	N	I	3	N	Y	\$299	\$299
Excalibur BBS	Excalibur Communications, Inc	918-496-7881	918-491-0033	918-496-8113	Windows	Unlim	8	OS	Y	I	3	N	Y	\$349	\$199
EXCELSIOR! Pro	Sycam Design Software	313-774-2153	313-772-5802	313-772-6442	Amiga	Unlim	Unlim	OS	N	I	3	N	Y	\$199	\$199
Faulken	INFO*Share, Inc	703-791-2910	703-791-2910	703-749-2889	DOS	?	64	I	N	3	O	I	Y	\$999	\$149
FirstClass	SoftArc, Inc	416-299-4723	416-754-1856	416-609-2250	MAC	100	22	OS	Y	I	N	I	Y	\$3450	\$95
GAP	GAP Development Co	714-496-3774	714-496-3774	714-493-3819	DOS	100	16	DV	Y	3	I	N	Y	\$359	\$79
Hermes II	Computer Classifieds	206-643-2316	206-643-7830	206-643-2874	MAC	10	10	OS	Y	3	3	N	Y	\$95	\$95
hi-BBS	XBR Communication	514-489-1001	514-489-4966	514-489-0445	MAC	130	?	OS	Y	N	O	N	Y	\$3400	\$70
Kitten	TelPro Technologies	804-442-5865	-	804-442-5867	DOS/OS2	999	?	OS	Y	3	3	N	Y	\$195	\$195
Magnum BBS	Gilmore Systems	805-379-3210	805-379-1341	805-379-3450	OS/2	Unlim	32	OS	Y	N	I	N	Y	\$900	\$75
MEGAHOST	ASCII Computer Enterprises	-	-	209-836-2402	DOS	10	8	DV	Y	3	3	N	Y	\$49	\$49
Multi-Net	Multi-Net Computer Communications	503-883-8099	503-883-7879	503-883-8197	OS2	999	12	OS	Y	N	I	N	Y	\$895	\$195
Novalink Professional	ResNova Software Inc	714-379-9000	714-379-9014	714-379-9004	MAC	Unlim	40	OS	Y	3	I	N	Y	\$300	\$300
OPUS-CBCS	214-528-4687	-	214-528-4943	801-261-8987	DOS	255	1	DV	Y	I	3	N	Y	Free	Free
PCBoard	Clark Development, Inc	801-261-1686	801-261-8987	801-261-8976	DOS	1000+	16	DV	Y	I	3	Y	Y	\$10000	\$170
PowerBBS	Power Computing	516-938-0506	914-833-3623	516-822-7396	Windows	Unlim	9	OS	N	3	I	N	Y	\$189	\$99
Powerboard BBS	NUIQ Software, Inc	914-833-3479	914-833-1479	914-833-1479	DOS	999	8	DV	Y	I	3	Y	Y	\$2300	\$99
ProBoard	ProBoard International	612-537-8655	612-537-8613	612-537-8659	DOS	255	8	DV	Y	I	N	Y	Y	\$49	\$49
ProLine	Morgan Davis group	619-670-0563	619-670-9643	619-670-5379	APPLE II	1	1	-	Y	N	I	N	N	\$159.95	\$159.95
RATsoft ST	Rodent Laboratories Software	913-441-1336	913-441-0596	801-756-2901	ATARI	?	?	-	Y	I	N	N	N	\$529	\$149
RemoteAccess	Wantree	800-363-7626	819-685-0994	913-441-0595	DOS	250	1	DV	Y	3	-	N	Y	\$400	\$95
RoboBoard/FX	Hamilton TeleGraphics	414-962-5967	-	819-682-7771	DOS	255	8	DV	Y	O	N	N	Y	\$175	\$75
RyBBS	The Ryco Company	514-962-5978	514-733-8644	414-962-1097	DOS	9	4	DV	Y	O	N	N	Y	\$45	\$45
Sapphire	Pinnacle Software	800-780-5483	514-733-8644	514-345-8654	DOS	1	1	-	N	N	N	N	Y	\$99	\$99
Searchlight BBS	Searchlight Software	412-846-2700	216-631-9289	216-631-9285	DOS	Unlim	10	DV	Y	I	3	3	Y	\$399	\$399
Second Sight Software	FreeSoft Co.	515-225-9552	-	412-846-5312	MAC	2	2	OS	Y	3	N	N	N	?	?
SpitFire BBS	Buffalo Creek Software	714-529-6328	714-529-9721	515-225-8496	DOS	255	1	DV	Y	3	I	N	Y	\$85	\$85
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Wildcat!	Mustang Software, Inc.	210-631-6090	-	210-631-5841	DOS	999	8	DV	Y	3	3	N	Y	\$320	\$80Z/Max
WWIV	WWIV Software Services	315-635-1882	315-635-1908	-	UNIX	Unlim	-	OS	Y	I	N	N	Y	?	\$695
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THE IRISH MALL ONLINE (909)307-1313 Redlands, California. since 06/01. Sysop: Sean Kenny. Using MajorBBS 6.21 with 4 lines on MS-DOS with 2 gig MB storage. US Robotics at 14400 bps. \$2.50 Hourly fee. This is a unique new service focussing on the needs of anyone with Irish interests. FREE online shopping for books, music, crystal, etc. Downloadable photos, news, Irish Internet info. Forums. Games. Coming soon: genealogy service!

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E2B2-The Total Environmental Source(TM) (913)897-1040 Overland Park, Kansas since 04/94. Sysop: Bill Taggart. Using TBBS 2.2 with 2 lines on MS-DOS 80486 with 200 MB storage. GVC at 14400 bps. No fee. An environmental BBS geared toward providing up to date information for both the public, as well as the technically oriented environmentalist. We tout a growing library of technical information and current environmental legislation pending in Congress.

The Overlords Castle (914)921-3476 Rye, NY since 06/93. Sysop: Jay Remsen. Using WildCat 3.90 with 1 line on MS-DOS 80486 with 500 MB storage. US Robotics at 14400 bps. No fee. We have 40 doors online, some of which have never been seen before. We are running FIDONET and carry between 100 and 150 conferences online, 20 file areas and some very friendly users. We consider ourselves the local Westchester County meeting place. :)

Hackney's Hideaway BBS (916)755-3964 Yuba City, California since 06/87. Sysop: Rich Hackney. Using PCBoard 15.1 with 1 line on MS-DOS 80486 with 800 MB storage. US Robotics at 14400 bps. No fee. Over 800 megs of online files plus 350 echomail conferences from the Intelec, Smartnet, PEN, Ilink networks. A very little used BBS over USR DS service, no validation, no waiting - get 60 minutes free access per day. How can you beat that?

For Adults Only BBS (916)962-3973 Sacramento, California since 01/88. Sysop: Dale DeBord. Using Oracomm-PLUS 7.1 with 17 lines on MS-DOS 80486 with 2000 MB storage. Practical Peripheral at 14400 bps. \$14 Quarterly fee. Sacramento's largest and friendliest Adult CHAT, FILES System. Adult Message Bases, CHAT, GIF, GL, DL, FLI, Text and Game FILES. FREE Member GIFs. DISCOUNT Member Plans for Students and Military. FREE 3-HOUR TRIAL PERIOD. DOWNLOAD ON FIRST LOGON!

Black Gold BBS (918)272-7779 Tulsa, Oklahoma since 06/81. Sysop: Michael Cline. Using PCBoard 15.1 with 26 lines on MS-DOS with 38000 MB storage. US Robotics at 28800 bps. \$30 Annual fee. Full PageSat and Planet Connect. 56k connect to Internet, 100 Doors, Full time SYSOP's and much much more. Many free areas and files with 45 minutes free access per day. 350 file areas, 3+ million messages less than 7 days old. Never Porno/Just hard work

ACCESS AMERICA (918)747-2542 Tulsa, Oklahoma since 03/88. Sysop: Vance Martin. Using TBBS 2.2 with 5 lines on MS-DOS with 6,500 MB storage. Hayes at 14400 bps. \$25 /100 hours fee. REAL ESTATE MARKET with photos, Internet mail & newsgroups, JOBMARKET, Ultra Chat, .QWK mail system, PhotoClassified ads, FidoNet, Matchmaker & Personal Ads, multi-player ANSI & RIP games, 40,000+ files, 8 CD-ROM's, Oklahoma & Branson travel info & MORE!

Entertainment Club BBS (919)544-7811 Research Triangle Park, North Car. since 04/94. Sysop: Brian Womack. Using MagNum OS/2 7.00C5 with 4 lines on Pentium/60 OS/2 with 8GB MB storage. Zyxxel at 19200 bps. \$8++ Annual fee. 1000++ File areas (40,000++ files w/ 6 SW CDROMs update quarterly), 500++ Message sections — will add more at user's request. 40++ REGISTERED Multi-User Games (Inter-BBS/Real-Time), Color Scanner serv., MatchMaking services (doors, parties) BARGAIN!

Micro Message Service (MMS) (919)779-6674 Raleigh, North Carolina since 10/82. Sysop: Michael M. Stroud. Using TBBS 2.2 with 10 lines on MS-DOS 80486 with 12000 MB storage. US Robotics at 19200 bps. \$45 Annual fee. NC's # 1 online info service support for PC, Mac, Amiga and Atari ST. Hundreds of new files added weekly. Expert leaders for each SIG. Authorized eSoft dealer, system design and TDBS programming. Give your online system a leading edge, call us first.

BOARDWATCH MAGAZINE

NATIONAL LIST OF ELECTRONIC BULLETIN BOARDS AND ONLINE INFORMATION SERVICES - August 1994

SERVICE	PHONE	DESCRIPTION	SPONSOR/SYSOP	LOCATION
ABC On-Line	(718)446-2157	21 Gigs online, TBBS, Internet, Fidonet, Entertainment, News	Michael Hajovsky	Queens NY
ADA 9X Project Bulletin Board	(800)232-9925	ADA Programming Language Revisions and News	Chris Anderson/Susan Carlson	Eglin AFB FL
ADA Information Clearinghouse	(703)614-0215	Information on ADA Programming Language/Military Specs	Department of Defense	Washington DC
AMUG Preferred BBS	(602)553-0721	Support for Mac users, 15,000 files, Conferences	Arizona Macintosh Users Group Inc.	Phoenix AZ
ANARC BBS	(913)345-1978	World Radio/TV Handbook - Short Wave Freq Lists/Scheds.	Assoc. of North American Radio Clubs	Shawnee Mission KS
APCUG - GlobalNet	(408)439-9367	Association of PC User Groups - Over 2000 UG officers	Paul Curtis/APCUG	Scotts Valley CA
AST Technical Services BBS	(714)727-4723	Superb support system for AST Computer Products	AST Research Inc.	Irvine CA
AT&T Support BBS	(908)769-6397	Support for PC 6300 and Other AT&T PC Models	American Telephone/Telegraph PC Division	Plainfield NJ
ATI Support BBS	(416)756-4591	Support for ATI Modems and Video Cards	ATI Technologies	Scarborough Ontario
Advanced Data Services Inc.	(301)695-9116	22 line PCBoard with 5.5 GB of Files	Blaine Brodka	Frederick MD
Alamo PC Organization	(210)496-5558	Numerous Files, Info	Robert Schoenert	San Antonio TX
Albuquerque ROS	(505)299-5974	36000 files/USA Today/Tradewars/Online Games	Steven Fox	Albuquerque NM
America's Suggestion Box	(516)471-8625	BBS Devoted to Collecting and Distributing Consumer Feedback	Joseph G. Jerszynski	Ronkonkoma NY
American Cybernetics BBS	(602)968-1082	Multi-Edit Product Support BBS	American Cybernetics	Tempe AZ
Applied Modeling Research RBBS	(919)541-1325	Environmental Protection Agency Atmospheric Models	William Peterson/EPA	Hurdle Mills NC
Aquila BBS	(708)820-8344	6 GB 25 Nodes Fidonet/Interlink/Metronet MCE IL/CHI Graphics	Kevin Behrens/Steve Williams/Doug Bell	Aurora IL
Argus Computerized Exchange	(713)530-8875	Home of Houston Area 713 BBS list, Connect Magazine	Pam Morrison	Lexington MA
Atomic Cafe BBS	(713)530-8875	Houston Area BBS list and Connect Magazine	Connect Communications Co	Houston TX
Atomic Cafe BBS	(903)758-2784	4 Gigs Online All Fidonet Message areas Over 200 door games	David Wachenschwanz	Houston TX
Atri BBS	(714)681-6221	Utilities/ASP/Patriquin Utis/Protocols	Walter Cade	Longview TX
Attention to Details	(818)988-0452	High-end Audio Components, Music, Video Reviews	Clint Bradford	Mira Loma CA
Audiofile Network	(513)624-0552	New Car Pricing Reports - Used Car Value Reports	Guy Hickey/Quatre Speakers	Van Nuys CA
Automobile Consumer Services	(301)252-0717	Software Distribution System - BBS Utilities	Automobile Consumer Services Inc.	Cincinnati OH
AviTechnic 1:261/662	(214)680-3406	Home of DFW Online Electronic Newsletter	Tom Hendricks	Lutherville MD
BBS America	(213)962-2902	Los Angeles' First Super BBS Under Development	Jay Gaines	Richardson TX
BCS BBS	(617)821-0882	General Topics - TBBS - Internet Mail	Jim Lee	Los Angeles CA
BCS IBM BBS	(617)864-0712	Macintosh Topics - Firstclass BBS Software	Boston Computer Society/Martin Hannigan	Boston MA
BCS Info Center BBS	(510)849-2684	Support for Macintosh owners - files - conferences.	Boston Computer Society/Martin Hannigan	Boston MA
BCS Mac BBS	(813)337-4950	Over 100 online games - Internet Mail - 8 lines - 48000 fls	Berkeley Macintosh Users Group	Berkeley CA
BMUG BBS	(310)371-3734	Home of EEEK! Bits - Weekly Electronic Trivia Magazine	Dave Ward	Fort Myers FL
Beach Board BBS 1:371/1	(805)987-5506	200+ message areas 60+ file areas Fidonet VNet Adult Topics	J. Black/K. Taghadossi	Torrance CA
Beyond Eternity	(303)973-4222	Distribution Service for USA Today/Boardwatch/Newsbytes	Lee Ladisky	Camarillo CA
Beyond the Realm	(215)657-6130	Information on 2000 Computer Books - 800 order number	Boardwatch Magazine	Littleton CO
Boardwatch Magazine Online Info	(216)694-5732	200,000 Book Titles Database - Online Ordering	Business & Computer Book Store	Willow Grove PA
Book BBS	(408)431-5096	Utilities, Macros, Programming Examples for Borland Products	Charles Stack	Cleveland OH
Book Stacks Unlimited	(603)431-7229	20 GB of Files - Adult areas - BBS Lists	Myles Bratter	Scotts Valley CA
Borland Download BBS	(218)365-6907	Canoe Trips/Resorts/Fishing/Wilderness in Minnesota	Borland International/Mike Fitz-Enz	Portsmouth NH
Botnay Bay EIS	(203)236-3761	24-line Social System - Chat - Games - Downloads	Gary Knopp/InfoNorth	Ely MN
Boundary Waters BBS	(303)733-0773	Support & Demo of Bryant Software & TBBS Products	Bruce Lomasky	West Hartford CT
Bruce's Bar & Grill	(303)758-1551	Citations to 4 Million Texts in Colorado Library System FREE	Alan Bryant	Denver CO
Bryant Software	(615)822-2539	Computer Aided Design File Distribution Network 1:116/32	Colorado Alliance of Research Libraries	Denver CO
C.A.R.L. Library Service	(312)545-8086	First Electronic Bulletin Board - Since 2/16/78	Stan Bimson	Hendersonville TN
CAD/Engineering Service	(408)985-8982	80000 Compact Disks, Order Online (telnet:cdconnection.com)	Ward Christensen/Randy Suess	Chicago IL
CBBS/Chicago	(416)213-6003	23GB/400000+ files, 3500 Conf's, USENET, IBM/Amiga/Mac	Neil Fleming/Jud Newell	Mississauga Ontario
CD Connection	(301)738-9060	One of the oldest PC User's Groups - 5500 members	Capital PC Users Group/Roger Fajman	Rockville MD
Canada Remote Systems	(908)988-0706	Home of TABBY Fidonet Interface Program for Apple Macintosh	Michael E. Connick	Bradley Beach NJ
Capital PC User's Group BBS				
Castle Tabby 107/412				

Caverns of the Abyss	(405)482-2980	4 Gigs Online CD Roms	Shannon Graham	Altus	OK
Celebration Station	(207)867-0800	Adventure Games, Chat, and Sigs - Children	Noel Stookey (Paul of Peter, Paul & Mary)	Blue Hill Falls	ME
Central Point Software	(503)690-6650	PC Tools - Central Point Anti-virus support board	Central Point Software Inc.	Beaverton	OR
Channel 1	(617)354-8873	70-line PCBoard - 8 GB Files - Internet - 1000's msg. confs.	Brian Miller/Tess Heder	Cambridge	MA
Chicago SysLink	(708)795-4442	Special Interest Areas for Ferret/Pet Owners. TRS80/Aviation	George Matyaszek	Berwyn	IL
Chinet	(312)283-0559	UNIX System offering Internet Mail	Randy Sues	Chicago	IL
City Lites PCBoard	(701)772-5399	9 GB files, Rimenet, Internet, FidoNet, ASP, Online Orders	John Lundell	Grand Forks	ND
City Online	(909)860-5399	City Government BBS Rip/Internet & more	Troy Butzlaff	Diamond Bar	CA
Classified Connection BBS	(619)566-7347	Giddy Girls - Nude GIF Images of the Girl Next Door	Bill Kennon	San Diego	CA
Cleveland Freenet	(216)368-3888	Cleveland City Info/Public Library - Free Internet Mail Box	Case Western University/AT&T/Ohio Bell	Cleveland	OH
Cloud Nine	(713)855-4382	15 meg, 30 Nodes	Harold Lucas	Houston	TX
Colorado Connection	(303)423-9775	Breeding, Raising, Taming, Exotic Birds	Terry Rune/Dave McClaugage	Arvada	CO
Community News Service (CNS)	(719)520-5000	News and Entertainment - 17 Lines Community Focus	Klaus Dimmler	Colorado Springs	CO
Compact Audio Disk Exchange	(415)824-7603	Buy/Sell/Trade Compact Audio Disks Online	Wayne Gregori	San Francisco	CA
Computer Business Services	(714)396-0014	Book/Publishing Consultant Nick Anis' BBS	Nick Anis Jr.	Diamond Bar	CA
Computer Business Services	(909)396-0014	Book/Publishing Consultant John C. Dvorak & Nick Anis' BBS	Nick Anis Jr.	Diamond Bar	CA
Computer Garden	(301)546-1508	Treasure Hunting - Metal Detectors - Online Catalog	Milford P. Webster	Salisbury	MD
Computing Canada Online	(416)497-5263	Adjunct to Excellent Canadian PC Newspaper	Computing Canada Newspaper	Willowdale	Ontario
Crosstalk Communications BBS	(404)740-8428	Product Support for Crosstalk for Windows/MM4/XVI	Digital Communications Associates	Roswell	GA
Cul-de-Sac Bar & Grill	(508)429-1784	Multiline Service - Ham Radio - Humor - TDBS Applications	Pete White	Holliston	MA
CyberStore - a COCONET BBS	(604)526-3676	All lines to v.32bis/v.42/v.42bis. CyberTools for BBS'es	CyberStore Online Info. Systems Inc.	New Westminster	BC
DAK Online Resource Center	(818)715-7153	DAK Mail Order Catalog - Breakmakers - CD ROMS - Computers	DAK Industries/Tom Krogh	Canoga Park	CA
DEMO Link	(303)220-0328	Free Demo Downloads of Quattro Pro/Lotus Magellan/More	BIX/Byte Magazine		
DNIS	(619)864-1468	Outstanding BBS Gateway to multiple information services	Mike Simmons		CA
Dark Side of the Moon	(408)245-7726	Home of WAFFLE, Unix UUCP BBS Software for DOS and UNIX	Thomas E. Dell/Darkside International	Palm Springs	CA
Data Bank	(913)842-7744	Information HQ, Support Board, Net-Mail & Files	Bob Oyler	Mountain View	CA
Data Core BBS	(310)842-6880	25 line Major BBS	Matthew Schoen/Delta Enterprises	Lawrence	KS
DataLink RBBS System	(214)394-7438	Weather Satellite Imaging, NOAA Satellite Tracking-AMSAT-NA	Dallas Remote Imaging Group/Jeff Wallach	Los Angeles	CA
Dawg Byte	(615)385-4268	ANSI Art Club 1:116/29	Kevin Snively	Carrollton	TX
Deep Cove BBS	(604)536-5885	16 line TBBS, 3500 MBytes files for IBM, MAC, Amiga	White Rock	Nashville	TN
Denver Exchange, The 104/909	(303)458-1227	28 Lines Adult BBS/Internet/Files/Chat/Games/Publications	Wayne Duval	Denver	CO
Denver Free-Net	(303)270-4865	Free Community Online Service - Health Info	James Craig	Denver	CO
Digicom	(812)479-1310	Home of Tech Support BBS List, Online Magazines, 1.7 Gigs	University of Colorado Health Science	Denver	CO
Distant Mirror BBS	(615)648-1782	Free Access BBS	Steve Perlo	Evansville	IN
Duke Graphics of San Diego	(619)793-8360	7 CD Roms Online, 4 gigs 50,000 files	Chris Duke	Clarksville	TN
EXEC-PC	(414)789-4210	Largest BBS in US - 280 Lines -650,000 files - 35 Gigabytes	Bob and Tracey Mahoney	San Diego	CA
EarthArt BBS	(803)552-4389	Wildlife/Conservation Art Gallery GIF Images	Embassador Wildlife Gallery/Bob Chapman	Elm Grove	WI
Ed-Net	(604)732-8877	Vancouver School Board Multi-Line Educational Network	Barry Macdonald/Vancouver Board of Ed	North Charleston	SC
Electric Ideas Clearinghouse	(206)586-6854	Energy Efficiency Efforts in Pacific Northwest-HydroElec	Bonneville Power Administration WSE	Vancouver	BC
Electronic Publishers BBS	(503)624-4966	News-Finance-Sports-Games-2GB File Library	Brian Cash	Olympia	WA
Electronic Zone, The	(412)349-3504	Specializing in Hypertext	William R. Forbes	Portland	OR
Energy Info Admin E-Publications	(202)586-8658	Variety of Petroleum/Coal/Electricity Energy Statistics	US Department of Energy	Indiana	PA
Entertainment & Graphics	(503)697-5100	Entertainment & Graphics	Jim Maxey	Washington	D.C.
Event Horizons	(503)697-5100	64 Line Digitized Graphics Image Library - Adult. GIF files	Jim Maxey	Lake Oswego	OR
Executive Network	(914)667-4567	Interlink Netmail National Host - Multiline PCBoard System	Andy Keeves	Lake Oswego	OR
Eye Contact BBS	(415)255-5972	22 line Oracom - Gay Issues - Popular Chat System	Bill Montgomery	Mt. Vernon	NY
FAA Flight Standards ASO-FSDO-15	(800)645-3736	FAA Flight Standards Publication & Info for the Aviation Com	FAA/Bill Hoenstine	Mill Valley	CA
FAX/Satellite Services BBS	(619)224-3853	NOAA Weather Satellite Images - Russian/Japanese Sat Pics	Scotty Olson	Orlando	FL
FCC Public Access Link	(301)725-1072	Equipment Authorization Status Advisory Service	Federal Communications Commission	San Diego	CA
FCC WORLD	(202)887-5718	FCC Documents, Forums	Smithwick & Belendiuk, P.C.	Columbia	MD
FEDLINK ALIX II	(202)707-4888	Info on Federal Libraries -Excerpts Library of Congress News	Federal Library Information Network	Washington	DC
FOG City BBS 125/10	(415)863-9697	Gay Community BBS - AIDS Info - Desktop Publishing - MACs	Bill Essex	Washington	D.C.
Falken Support BBS	(703)803-8000	Support for FALKEN software - 16 lines - doors - chat	Herb Rose	San Francisco	CA
Farwest BBS	(604)381-3934	Large Western Canada Galacticom Info System	Ren L'Ecuier	Woodbridge	VA
Fido Tech Stand	31-30-735900	Fidonet Technical Information for Holland	J.J. van der Maas	Victoria	BC
				Utrecht	Holland

BOARDWATCH MAGAZINE

NATIONAL LIST OF ELECTRONIC BULLETIN BOARDS AND ONLINE INFORMATION SERVICES - August 1994

SERVICE	PHONE	DESCRIPTION	SPONSOR/SYSOP	LOCATION
Fire & Ice	(313)373-8608	A Family BBS With Christians Discussions	William Sims	MI
Fisherman's Net	(614)837-0400	Dedicated to Fisherman	Lloyd Davidson	OH
Foundation Online Service	(203)968-8752	15+ Gigs 8 Lines Internet	David Deutsch	CT
Fred the Computer	(508)872-8461	Newspaper BBS. Wierdnet Newswire. List of MA Libraries	Middlesex News-Adam Gaffin	MA
FreeBoard BBS, The	(804)744-0797	Desktop Publishing File Distribution Network 1:264/212	Bill Hunter	VA
Fun Connection	(503)753-8431	Multiline Entertainment - 8 Lines Games/Chat/News	Vincent Reece	OR
GDP Technologies	(303)673-9470	Outstanding IBM Shareware on a small system	Tom Getty's	CO
GISnet BBS	(303)447-0927	Graphics Information Systems/Mapping topics	Bill Thoen	CO
GLIB	(703)578-4542	Gay and Lesbian Information Bureau - 11 Lines - 9600 bps	Community Educational Svcs. Foundation	VA
GPO WINDO Online Service	(202)512-1387	Fed Information from EPA, DOE, State Department - others.	US Government Printing Office	DC
Galacticomm Demo System	(305)583-7808	Customer support for Major BBS	Galacticomm	FL-
Garbage Dump	(505)294-5875	Hottest Chat in America - National Access \$1.75 per Hour	Dean Karl & Simon Clement	NM
Gateway Communications BBS	(714)863-7097	Novell Network/TCP-IP Shareware Utilities	Carol De Jesus	CA
Gateway On-Line	(313)291-5571	Interactive Chat/MultiplayerGames,Usenet/Internet,E-mail	Jeff Breithner/Bill Mullen	MI
General, The	(619)281-8616	Popular File Library - GIF Images	Marc Teitler	CA
Greenpeace Environet	(415)512-9108	Ecological and Peace Issues - Disarmament/Toxics/Wildlife	Dick Dillman/Greenpeace	CA
HH Info-Net BBS	(203)246-3747	MS Windows and OS/2 Files our specialty	Lee Winsor	CT
Hackers R Us Online	(602)945-8416	Online Games, Files & Tech Discussions	David Ray	AZ
Hackers World BBS	(309)672-4405	Adult Files, Fidonet Echo-Mail Adult-net	Martin Belicke	IL
Harris City Medical BBS	(713)790-1093	Medical Information	Monica Faulk	TX
Hayes Advanced Systems Support	(800)874-2937	Customer Support Line for Hayes Customers. V-series/Ultra	Hayes Microcomputer Products	GA
Heartland Free-net	(309)674-1100	Community Online Service - Free Internet E-Mail Boxes	Peoria County Board/Bradley University	IL
Hepnet/Satronics TBBS	(215)698-1905	Reptile and Amphibian Studies - Poison Snakes/Toads/Fish	Mark Miller	PA
HoloNet	(510)704-1058	National Access,INTERNET,USENET,CHAT,GIFS,FILES	Information Access Technologies, Inc.	CA
HouseNet BBS	(410)745-2037	Home Fixup/Repair/Renovation Tips, Advice, and Articles	Gene and Katie Hamilton	MD
Howard's Notebook 1:280/25	(816)331-5868	Environmental, Peace, Justice since 1982 - 4 nodes	Jim Howard	MO
Hysterics	(613)231-7144	Amiga File Distribution Network 1:163/109	Russell McOrmond	GA
IBM National Support Center BBS	(404)835-5300	IBM PC User Groups Database - Newsletter Exchange	IBM National Support Center	NY
Inbound/Outbound/Teleconnect	(212)989-4675	Telephone Sales Trade Magazine Online Service	Harry Newton Publications	FL
Infinite Space Online	(407)856-0021	32 Line Interactive Chat & Games Majornet	Charlie Scherker	NJ
InfoHost Demo BBS	(201)335-2253	Demo BBS for InfoHost BBS Software - Multiline - Database	A-Comm Electronics Inc.	TX
Inns of Court, The	(214)458-2620	LAN Related Files and Utilities 1:124/6101	Arthur Geffen	OR
Intel PCEO Support BBS	(503)645-6275	Support for Intel PC Products - Inboard 386/AboveBoard 286	Intel Corporation PCEO Division	NV
Inter Comm	(702)359-2666	6 Line 5.5 Gig 30,000 Files	Roger Brown	FL
InterMail Tech Support BBS	(305)436-1884	Home of InterMail, Front End Mailer for FidoNet 1:369/102	Patrik Bertilsson	NY
Invention Factory	(212)274-8110	46 Lines - 100 Directories - Full Usenet Feed - 8.2 GB	Mike Sussell	WA
Investor's Online Data	(206)285-5359	Online Investment/Stock Market Information/Tech Analysis	Don Shepherdson	CA
JDR Microdevices BBS	(408)559-0253	Online Hardware Order - Catalog - 1.1 GB Files - Quizzes	JDR Microdevices	GA
JOBBS	(404)992-8937	Online Job Listings - 2186 Technical Pos. - 10,000 Corps.	Alpha Systems Inc./Bill Griffin	MN
KIMBERLY BBS	(612)340-2489	Prime Rate-Fed Funds-T-Bill-Discount Rate-Economic Data	Federal Reserve Bank of Minneapolis	NY
Keith Graham Shareware Support	(914)623-0039	OPTIK, TEXT2COM, CBOOT, very good shareware utilities	Keith P. Graham	CO
King's Market BBS 104/115	(303)685-6091	400 MB Books, Writers Area - TRS 80 Support	Jim and Karen Burt	CA
Knight Vision BBS	(213)344-3600	Chess and Backgammon - 8 lines - "Intelligent Entertainment"	Matthew Beelby	AZ
LANtastic BBS	(602)293-8065	Support for LANtastic local area network	Artisoft Inc.	NY
LICA Limbs BBS	(516)561-6590	Member written software PC Board 15.0 USR HST Since 1980	Dave Minott	NY
Lace's Place	(718)822-3552	Female Domination Adult BBS online since 7/91	Ellen Grogan	CA
Late Night Software 125/555	(415)695-0759	Home of UFGATE - Software to connect PCs to UUCP/Usenet	Tim Pozar	CA
LegalEase	(509)326-3238	Legal issues/Forms - Law BBS List	Bill Sorcinelli	WA

Lincoln Cabin BBS	(415)752-4490	General Interests & Rime	Steve Pomerantz	San Francisco	CA
MAC-LINK	(514)486-8959	Macintosh Oriented Support BBS - 6 Lines - Informa/BIX	Mark Smith	Montreal	Quebec
METRO Online Entertainment	(212)831-9280	32 line DLX with City Guide/Ski Database - Matchmaker - Chat	Bruce Kamm/Metro Online Services	New York City	NY
MOC-UR'S EMS, The	(818)366-1238	5 Lines - 8 Networks CD-ROMS - 2.8 GB Hub Services HSTV.32	Tom Timpidis	Granada Hills	CA
MacCircles	(303)526-2219	Mac System Software distributor, mail, sigs, files	Patricia O'Connor	Golden	CO
MacInternational	(803)798-3755	Macintosh support since April '85. FirstClass BBS	Ralph Yount	Columbia	SC
Macalot Bulletin Board	(412)846-5312	Support for Second Sight BBS Software for Macintosh	Jeff Dripps/FreeSoft Company	Beaver Falls	PA
Magpie BBS	(212)420-0527	Support/Demo System for Magpie BBS/Conferencing Software	Steve Manes	New York	NY
MaxiHost Support BBS	(209)836-2402	MaxiHost BBS - small, very easy to run BBS	Don Mankin	San Ramon	CA
Mayan Antiquities	(214)691-1316	Mayan Culture and Antiquities	Ron Whipple	Dallas	TX
McAfee Associates BBS	(408)988-4004	Computer Virus Information - VIRUSCAN and CLEANUP	John McAfee/CVIA	Santa Clara	CA
Med Technet	(716)688-1552	Educational research for Clinical Laboratory professionals	Bill Hiliwa	East Amherst	NY
Medi-Call BBS	(818)330-1739	Active 2 lines PubSvc w/ 120 netmail confs., & GIGs of Files	Gordon Huyck	La Puenet	CA
Meeting Works, The	(212)737-6932	Meeting/seminar/convention planning information.	John Mackenzie	New York	NY
Micro Foundry, The	(415)598-0398	2.2 GB Downloads - Your Online Software Source - Boardwatch	Thomas Nelson/Clockwork Software	San Jose	CA
Micro Message Service	(919)779-6674	USA Today/Boxoffice Magazine - Large Download Area	Mike Stroud	Raleigh	NC
Microrim Technical Support BBS	(206)649-9836	Support for Popular R-Base Relational Data Base System	Microrim Corporation	Redmond	WA
Microsoft Download BBS	(206)936-6735	Windows Technical Notes and Support Information	Microsoft Corp/Scott J. Honaker	Bellevue	WA
Microsystems Software Inc.	(508)875-8009	HandiWare Software for Handicapped - CodeRunner C Utilities	MSI - Reed Lewis	Framingham	MA
MindVox	(212)989-4141	Internet Access, E-Mail, Newsgroups, ftp/telnet	Phantom Access Technologies	New York	NY
Minnesota Space Frontier	(612)459-0892	Minnesota Space Frontier Society - NASA News	Ben Husset	Minneapolis	MN
Monterey Gaming System	(408)655-5555	A Custom Multi-user BBS with Conferencing and Custom Games	David Janakes	Monterey	CA
Mountain Air BBS	(703)427-0226	Adult Based BBS	Edward Lee Wood, Jr.	Roanoke	VA
Movie BBS	(718)939-5462	Movie Reviews and Information - Television	Clarke Ulmer	New York	NY
Mustang Software	(805)873-2400	Support for Mustang Software Products	MSI Sysop	Bakersfield	CA
N.A.C.D. BBS	(912)246-3280	Cave Scuba Diving - Superb Special Topic System	National Assoc. of Cave Divers	Gainsville	FL
N8EMR Ham BBS	(614)895-2553	login:hbbs HAM Radio/AMSAT Unix System - Satellite/Packet	Gary Sanders	Westerville	OH
NAPLPS Graphics BBS	(613)727-5272	NAPLPS Graphics Terminal and Editor Software	MicroStar Corp.	Nepean	Ontario
NASA SpaceLink	(205)895-0028	NASA Educational Affairs Div. - Flight Data/Space History	Marshall Space Flight Center	Huntsville	AL
NIST ACTS	(303)494-4775	Automated Computer Telephone Service - Sync PC to NBS Time	Nat. Institute for Standards/Technology	Boulder	CO
NOAA Space Environment Lab	(303)497-5042	Solar Flare/Geomagnetic Data Online	National Oceanographic/Atmospheric Admin	Boulder	CO
Namu BBS	(913)273-1550	Amateur Radio Interests	Rob Nail	Topeka	KS
Nashville Exchange	(615)383-0727	12 line TBBS - Games/TDDBS Software Development 1.8 GB	Ben Cunningham	Nashville	TN
National Genealogical BBS	(703)528-2612	Family History - Genealogical Research - Gravestone Haunting	National Genealogical Society	Arlington	VA
Netcom Internet Guest System	(408)241-9760	Internet Access System - type "guest" at login for info.	Netcom Online Communications Services	San Jose	CA
Network World Bulletin Board	(508)620-1178	LAN and WAN Issues and Technology	Network World Magazine	Framingham	MA
Newbed	(506)453-2147	Educational System K12 Net	William Brydges	Fredericton	NB
Newtown Express BBS	(215)943-6806	14.5 Gigs/700+SIGS 18 Lines Large Adult Section USA Today	Anthony Maglietta	Newton	PA
Night Shift, The	(818)955-5155	16 lines/chat/Usenet Newsgroups/Internet Mail/USATODAY	Charles Hitt	Burbank	CA
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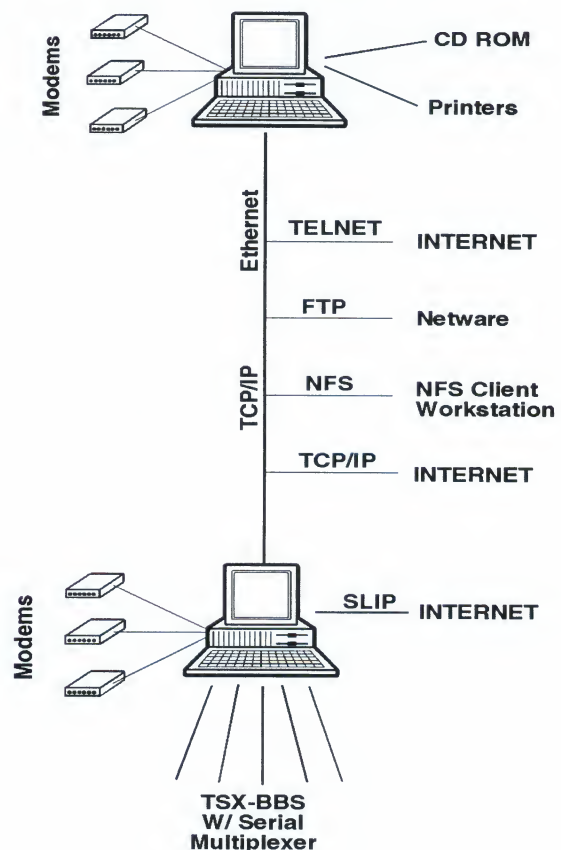
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*Picture shows complete 16 user TBBS/TDBS System.

INTERNET JUNKIES JOIN OTHER CRACKPOTS TO WREST CONTROL OF THE COMPUTING SCENE AWAY FROM OLD-TIMERS

Computers are my hobby. I'm one of the few computer columnists writing in mainstream journals who can still say that. I think Bill Machrone at PC Magazine might also admit to this. The rest of the hobbyists have bailed out and are off doing weird

things or
exploring
the IRC
on the
Internet.
Too many
have been
shirking
their



responsibility to the hobby and they've let the direction of computing be controlled by the nutballs.

Most of the computer hobbyists ran away in the mid 1980s when the computer magazines went after business users. If you can't talk to the business user, you're out of luck nowadays. I have people complain to me that I talk to the business user TOO MUCH and I should go back to my 1976 hobbyist roots. I counter-argue that the computer hobbyists are losing numbers and we have to cajole the business guys into becoming hobbyists by adding some park to the scene. You can't get people

car collecting unless you show them some neat cars to collect. Same with computers as a hobby. They need to find out cool things. I make it a point to talk about chips and faster computers and wildly interesting software to generate enthusiasm. Sometimes I feel I'm alone in the forest when I do this because not enough hobbyists are championing the hobby nowadays.

In the late 1970s the computer hobby craze was going strong. The computer magazines were geared for enthusiasts. There were a slew of books for beginners. As an aside I should mention that the dearth of books for beginners until DOS FOR DUMMIES was a function of the book publishers who all said that beginners books don't sell. This assertion is a classic if you think about it. I mean how can books for beginners not sell? It's what books are for. Crappy books for beginners don't sell — THAT was the problem and it was turned into a generality. But I digress.

In the 1970s there were plenty of users groups soliciting newcomers. There were numerous socialistic ideals being promoted. The People's Computer Company was a typical publishers name. Computers were seen as something beneficial and useful and somehow helpful in some future world. As they became spreadsheet machines and word processors, the idealists hoping for something grand in all this decided that the excitement was someplace else. A good portion of the hobbyists went into and developed the bulletin board scene. Many cut themselves off from mainstream computing. I fear that many of them will be whip sawed if the platform shift to the PowerPC from the current PC/Mac world occurs in the next few years because they haven't been keeping up with trends. (I say this only because I can still find BBSs running at 2400 baud!)

They too have become like the dullards who go to COMDEX. Bored. Uninspired. A worse trend, though, is the growth of the Internet as fueled by newcomers who have suddenly discovered modems. To this group of narrow focused hobbyists, the Internet is life itself. Very few Internet junkies (I call the Internet "the Crack Cocaine of Computing") have a clue about the office computing, BBSs or computing in

general. Worse, after a month on the Net (as everyone lovingly calls it) these folk consider themselves computer experts with royalty status. It's unbelievable. It's particularly incredible when you play on the Net with anything other than Mosaic. Can you spell "Clunker?"

Then there's the IRC. I've written about this monstrosity in a number of publications saying how out-of-control it is with weird racist crap scattered about. I was recently e-mailed by some blokes who told me how it's actually policed and that people monitor it and bad guys are tossed off. And cows can fly. I can go on the IRC anytime of the day and find something terribly offensive. And I'm a libertarian by nature!

So while the sincere up-to-date BBS operators struggle because the media equates them with child porn while it equates the Net with "Information Superhighway!" the would-be hobbyist recruit sides with the Internet crowd. They get all gah-gah over the Net and how you can send mail and download files and look into a database. Holy Mackerel! When did these miracles arrive!!!

It's enough to make you sick. With 50,000 BBSs around the country with all sorts of mail systems and Internet features for the last 15 years, you'd think someone would take notice. Nope.

What this means is that most BBSs will have to eventually become Internet access providers as Jack Rickard has asserted in these pages. He's right. Gee we can all spend our time bored out of our wits trying to keep up with a bunch of crappy news groups whose messages consist of huge and ludicrous Internet headers followed by comments such as "Sez You!" This two word message is followed by the senders dweebish handle which you immediately realize is owned by some hopeless Internet geek who scammed his account from the Supercomputing Center and spends all his waking hours contributing what he thinks is stirring commentary. Finally, to waste more bytes, at the end of these insightful messages there's a ASCII box created with dashes and colons in which is contained every conceivable e-mail address for Mr. "Sez Who?" followed by an irrelevant but coy quote from

Plutarch, or, worse, a stupid pun he stole from an AOL profile.

Is this what online communication is coming down to? Is this the Information Superhighway? I think it is. And I also think it's going to get a lot worse before it gets any better. This is because the fresh hobbyist blood is heading to the Net and without the control and perspective of the old-timers, these kids will go nuts.

Take that dumb box at the end of every Internet e-mail message that 90% of the Internet users attach. Imagine a movie instead of the ASCII box. Yes, a movie. The guy himself can be at the bottom of the screen endlessly waving. Little phrases can be coming out of his moving mouth showing up as cartoon balloons. A database of Greek philosophy can spew from the little head at the bottom. Thank goodness only ASCII is used today or this kind of weirdness would dominate the messages. I've always thought imbedded photos in text were bad enough, but when they started to promote the idea that a message could have a quicktime movie or some such thing in it, then I became concerned.

The next thing to take place on the Net is going to be desktop video sex. This will start out as a picture and voice coming over the net and being displayed on the computer. You can figure out for yourself what might go on between two lovers in this context. When this technology was first explained to me my comment was, "I think that if many of these people actually see each other they won't be too terribly turned on, if you know what I mean." The retort was simple, "They won't be seeing each other, everyone will be using aliases! That's the beauty of it!" In other words, long before sexy Kimberley, that Northwestern teaching assistant you've been sending hot e-mail to over the Net, goes on screen to do her Net striptease for you and the frat brothers, she will have already created a bogus image. For all you know, Kimberley might even be a guy with some good voice processing software. But what you see is a Kim Bassinger lookalike on the screen. Puh-leeze! This concept really sucks and the Internet junkies are telling me it's hot. Meanwhile, as this abomination progresses, the virtual reality crackpots and multi-media mavens are forming an unholy alliance with the Net junkies. We're talking about every screwball geek, loose cannon, and bug-eyed nerd in the world here — all joining forces. The only

thing missing from this ungodly mix are the techno-musicians. Luckily most of them can't afford good new computers and will instead be holding on to old Amigas.

This Golly-gee-whiz triad actually hopes to control the future of everyday computing. They have the youthful vigor, the thrilled newcomers and the insane futurists. The old hobbyists are like IBM — pooped out. Just look around. Nobody even admits to being a computer hobbyist. "What's your hobby?" Who says "computers" anymore? Say, "Net Surfer, man!" or "Multi-media production" or "virtual reality" and you'll elicit a "Cool!" Go ahead and say "computers." Geek!

MIKE RAY'S CORN-MEAL PANCAKES

Over the years I've collected odd recipes from friends and sometimes the origin is lost completely. This is an example. Found on a 3 x 5 card in the bottom of a drawer it has a handwritten note scribbled on the side: "Mike Ray says they are like heaven." For pancake lovers looking for something different, these fill the bill. Try them with blue and red cornmeal if you want to start a conversation.

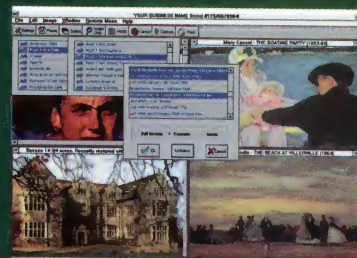
I probably collected this recipe in the late 1970's when I was on a jonny-cake jag having bought a variety of stone ground grains from various small east coast mills.

Ingredients:

3 eggs, separated
2 cups buttermilk
1 cup flour
1 cup cornmeal
1 teaspoon soda
1 1/2 teaspoon salt
1/4 pound butter

Beat whites stiff and set aside. Thoroughly mix buttermilk, yolks and sifted dry ingredients. Add melted butter, mix. Finally fold in beaten egg whites. Cook as you would a normal pancake. Serves 6.

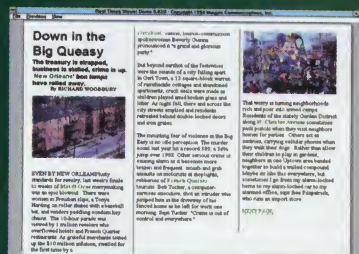
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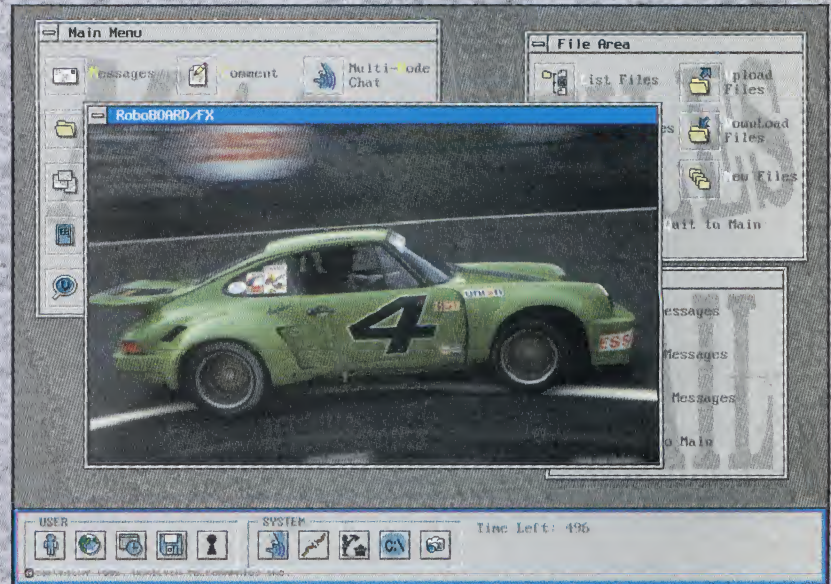
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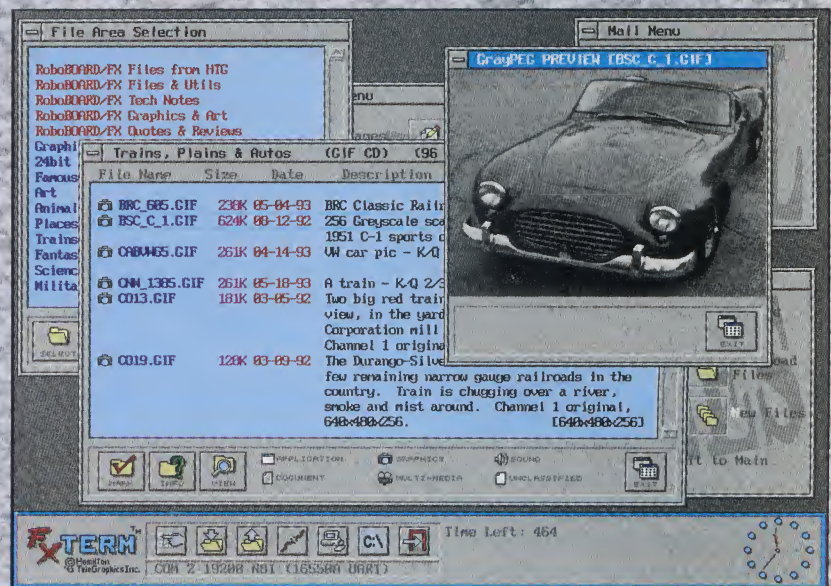
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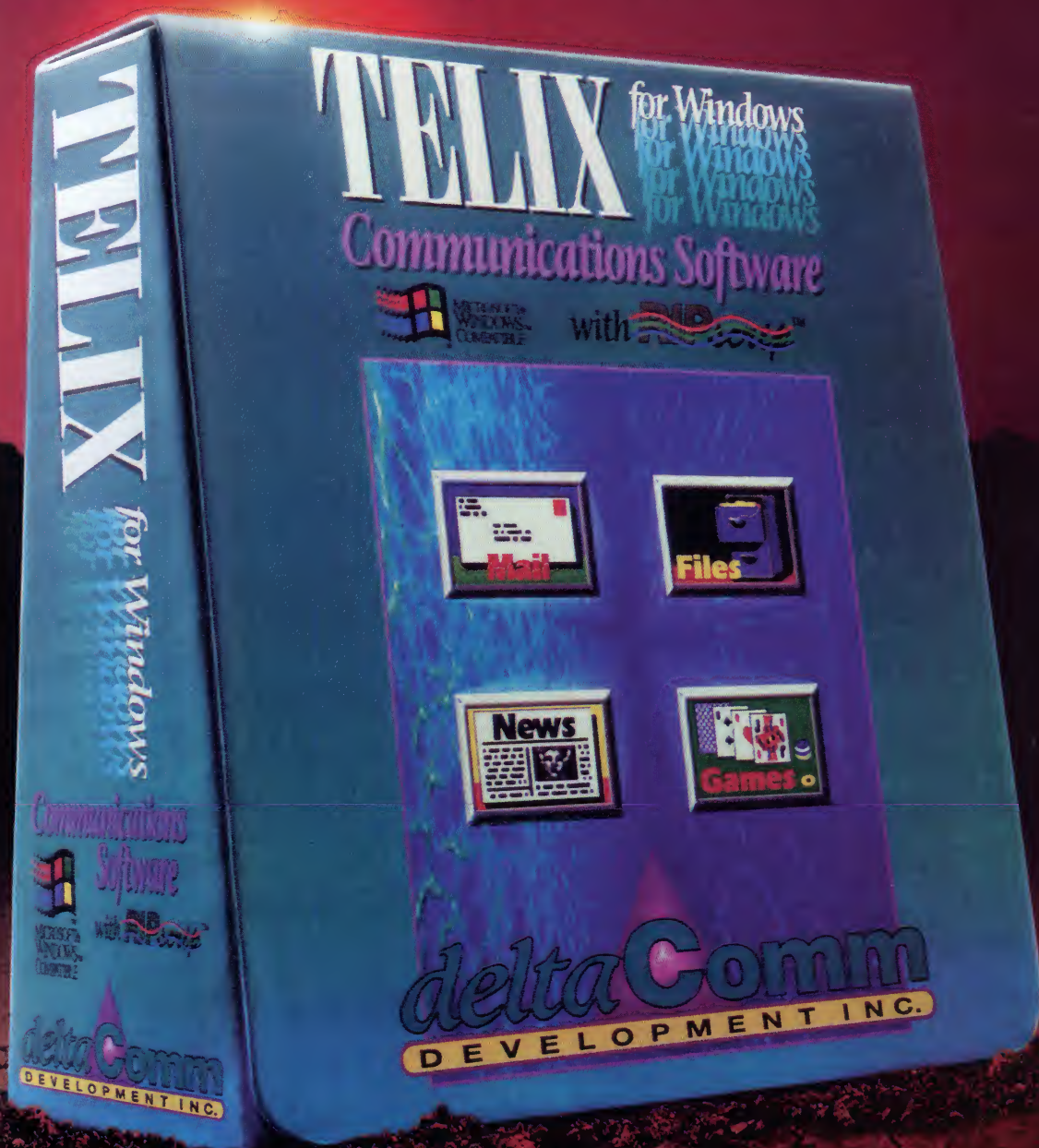


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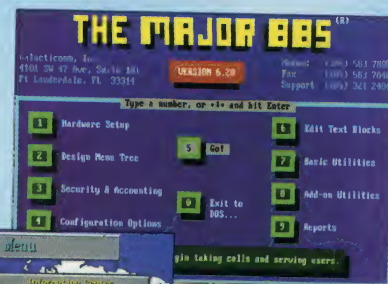
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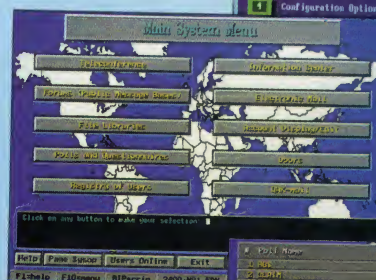
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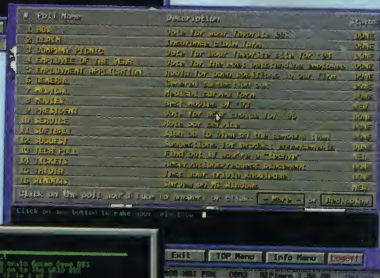
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